SoMo® 650
Handheld Computer

User's Guide

socket
Business Mobility Now!™

8/2011 **Document # 6410-00287 Q**

COPYRIGHT NOTICE

Copyright © 2008-2011 Socket Mobile, Inc. All rights reserved.

Socket, the Socket logo, SoMo, SocketCare, SocketScan, Connect!Agent, and Wi-Fi Companion are trademarks or registered trademarks of Socket Mobile, Inc. *Bluetooth* and the *Bluetooth* logos are registered trademarks owned by *Bluetooth* SIG, Inc., U.S.A. and licensed to Socket Mobile, Inc. Wi-Fi and the Wi-Fi logo is a registered trademark of the Wi-Fi Alliance. Windows Mobile is a trademark of the Microsoft group of companies. All other brand and product names are trademarks of their respective holders.

The SoMo 650 includes technology licensed under European Community Registered Design Nos. 000745245-0001, 000745245-0002 and 000745245-0003.

Reproduction of the contents of this manual without the permission of Socket Mobile is expressly prohibited. Please be aware that the products described in this manual may change without notice.

Feel free to contact Socket Mobile at:

Socket Mobile, Inc.
39700 Eureka Drive
Newark, CA 94560-4808
USA

http://www.socketmobile.com/contact

Other than the above, Socket Mobile can assume no responsibility for anything resulting from the application of information contained in this manual.

Please refrain from any applications of the SoMo 650 that are not described in this manual. Please refrain from disassembling the SoMo 650. Disassembly of this device will void the product warranty.

You can track new product releases, software updates and technical bulletins by visiting the Socket Mobile website at: http://www.socketmobile.com.

IMPORTANT SAFETY INSTRUCTIONS

Please read and follow these safety instructions before using your device for the first time, and save them for future reference.

- Keep away from extremely hot, cold or humid conditions.
- Avoid using in dusty environments.
- Do not allow the device to get wet.
- Avoid strong force, shock or vibrations.
- Do not open your device. Any attempts to open this device will void the warranty.
- Do not place objects on top of the device.
- Avoid removing the battery without turning off the device.
- Do not charge the device in extremely hot or cold conditions.
- Please only use the supplied USB synchronization cable.
- Please do not use other chargers or adapters, as these may damage your device.
- Do not remove SD/MMC or CF cards while they are being accessed.
- Do not use this device in damp, wet or rainy conditions.
- Do not insert metal objects into the sync/charging port of the SoMo.
- Keep the SoMo and its accessories away from children.

TABLE OF CONTENTS

COPYRIGHT NOTICE 2

IMPORTANT SAFETY INSTRUCTIONS 3

1 | INTRODUCTION 6
- PACKAGE CONTENTS 7
- PRODUCT REGISTRATION 7
- SOCKETCARE™ EXTENDED WARRANTY 7
- SOCKET THIRD-PARTY ACCESSORIES RECOMMENDATION (STAR) 7
- SYNCHRONIZATION SOFTWARE 7
- HARDWARE FEATURES 8

2 | GETTING STARTED 12
- STEP 1: INSTALL THE BATTERY 12
- STEP 2: CHARGE THE BATTERY 13
- STEP 3: SET UP YOUR SOMO 650 14
- STEP 4: INSTALL SYNCHRONIZATION SOFTWARE ON HOST PC 15
- STEP 5: CONNECT THE SOMO TO HOST PC 16
- STEP 6: SET UP YOUR DEVICE PARTNERSHIP 18
- GETTING STARTED WIZARDS 19

3 | USING THE SOMO 650 29
- STYLUS 29
- HOLD SWITCH 29
- START MENU 30
- ONLINE HELP 30
- WIRELESS RADIO MANAGER 31
- SOMO 650 POWER PLUS BATTERY FRIENDLY® UTILITY 33
- BACKLIGHT AND POWER SETTINGS 35
- CPU PERFORMANCE UTILITY 36
- VOICE RECORDER 37
- ADDING A USB KEYBOARD/MOUSE 37

4 | WI-FI COMPANION 38
- TURNING ON THE WI-FI RADIO 39
- MAIN SCREEN OF WI-FI COMPANION 41
- WI-FI STATUS ICON 41
- WI-FI FINDER 42
- FINDING AND CONNECTING TO A WLAN 43

5 | SOCKETSCAN 10 FOR CHS SERIES 7 BARCODE SCANNERS 45
- STEP 1: CHARGE THE CHS 46
- STEP 2: INSTALL SOCKETSCAN 10 46
- STEP 3: PAIR THE CHS WITH THE SOMO 47
- STEP 4: START APPLICATION 48
- STEP 5: SCAN BARCODES 48

6 | SOCKETSCAN FOR PLUG-IN SCANNERS AND READERS 49
- STEP 1: ASSIGN A TRIGGER BUTTON 50
- STEP 2: START SOCKETSCAN 51
- STEP 3: INSERT THE CARD 52
- STEP 4: START APPLICATION 53
- STEP 5: SCAN OR READ DATA 53

7 | SOMO 650 BACK PACK SOFTWARE 54
STEP 1: CONFIGURE A MODEM CONNECTION 55
STEP 2: PREPARE THE HARDWARE 56
STEP 3: CONNECT TO NETWORK 56

APPENDICES
A SPECIFICATIONS 57
B CARE AND MAINTENANCE 59
C RESETTING THE SOMO 650 60
D UPGRADING THE ROM IMAGE 66
E TROUBLESHOOTING 69
F TECHNICAL SUPPORT 70

LIMITED WARRANTY 71
DISCLAIMER 72
REGULATORY COMPLIANCE 73

1 | INTRODUCTION

Thank you for purchasing the SoMo 650 handheld computer. The SoMo 650 is a durable, Windows Mobile powered device that can help your business increase the productivity of mobile workers, improve the visibility of data in the field, and automate manual processes.

There are multiple configurations to suit different type of applications:

Model	Configuration	Target Industry
SoMo 650-E	Standard	Various
SoMo 650Rx-E	Antimicrobial with Extended Battery	Healthcare
SoMo 650DX-E	Radio-free (No Bluetooth or Wi-Fi)	Government/high-security and batch applications

READY TO CUSTOMIZE

The SoMo 650 can be deployed out the box with a wide range of Socket or third-party peripherals, because it comes pre-loaded with the following software:

Socket/Third-Party Peripheral	Pre-loaded Software
Socket CHS v3 *Bluetooth* barcode scanners	SocketScan™ 10 keyboard wedge software
Socket barcode, RFID and magnetic stripe readers (plug-in cards, CRS, CHS v2)	SocketScan™ keyboard wedge software Connect!Agent *Bluetooth* software[1]
Socket 56K Modem Cards	Modem Utilities
Socket 10/100 Ethernet Card	Ethernet Utilities
Socket SoMo 650 Back Pack wireless broadband ExpressCard adapter	Drivers, utilities
UIC UIC683 contactless/mag stripe card reader	SocketScan keyboard wedge software
SocketSerial Serial I/O Card, Shielded USB-to-Serial Adapter, USB Ethernet Gigabit Adapter	Drivers

Socket also offers a wide range of accessories for the SoMo 650, including screen protectors, Multi-Bay Chargers, and more. http://www.socketmobile.com/products/

POWER MANAGEMENT SOFTWARE

The SoMo 650 features the following power management software so you can optimize battery life according to your performance needs:

Software	Description
Socket Power Plus Battery Friendly® utility	Performance optimization, analysis and troubleshooting utility
Socket CPU Performance utility	Processor performance optimization utility
Socket Hold Switch utility	Configuration utility for hold switch

[1] *For Windows Mobile 6 Service Pack 8 or later, Connect!Agent software is pre-loaded but not installed.*

PACKAGE CONTENTS

All SoMo 650-E, SoMo650Rx-E, and SoMo 650DX-E configurations come with the following items:

- SoMo 650 handheld computer
- Lithium-ion battery
- USB sync/power cable
- AC adapter
- 2 rubber screw caps
- Quick Start Guide
- Getting Started CD with software and user documentation

Additionally, the "M" versions of the SoMo come with the following accessories:

SoMo Version	Additional Accessories Included
650-M 650Rx-M 650DX-M	• Sync/charging cradle • Belt carrying case • 2.5mm to 3.5mm audio headset adapter • Audio headset with microphone

PRODUCT REGISTRATION

Socket highly recommends that all customers register their products. Product registration is required to access technical support. Registered users also benefit free service packs and other updates for the SoMo 650.

Register online at: http://support.socketmobile.com/

Alternatively, if you have Windows Mobile 6 Service Pack 8 or later, you can use the Getting Started wizard for SoMo registration. In the Today screen, tap **Getting Started**.

SOCKETCARE™ EXTENDED WARRANTY

SocketCare is an enhanced service program, purchasable from an Authorized SocketCare Reseller within 30 days of your SoMo purchase. Program features include:

- Faster turnaround for product repair, replacement, and support
- Exclusive access to technical support

For a list of Authorized SocketCare Resellers, please visit:
http://www.socketmobile.com/support/socketcare

SOCKET THIRD-PARTY ACCESSORIES RECOMMENDATION (STAR)

The STAR Program assembles third-party accessories that have been tested for compatibility with Socket products. Featured products include keyboards, smart card readers, cases, and more. http://ww1.socketmobile.com/products/star.aspx The SoMo comes pre-loaded with software for STAR products from UIC and SocketSerial.

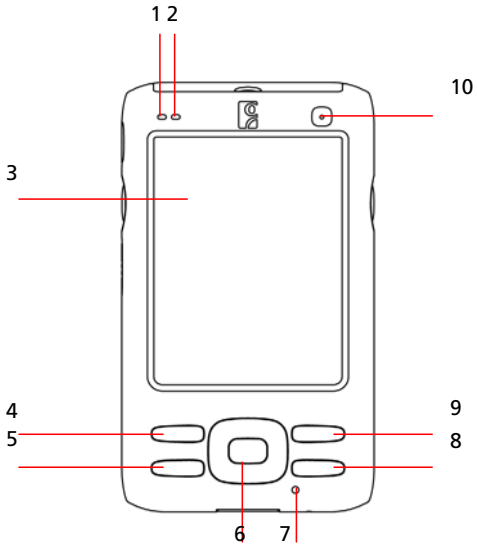
SYNCHRONIZATION SOFTWARE

Before you start using your new SoMo 650, you should have a host PC with the correct synchronization software installed.

OS on Host PC	OS on SoMo	Synchronization Software	Microsoft URL (Free Download)
Windows 7/Vista	Windows Mobile 5 or 6	Windows Mobile Device Center	http://www.microsoft.com/windowsmobile/devicecenter.mspx
Windows XP/2000	Windows Mobile 5	ActiveSync 4.2+ (included on CD)	http://www.microsoft.com/windowsmobile/en-us/help/synchronize/activesync-download.mspx
Windows XP/2000	Windows Mobile 6	ActiveSync 4.5+ (included on CD)	

HARDWARE FEATURES

Front



1. Wireless Status LED (Blue/Green) – indicates *Bluetooth*®, Wi-Fi®
2. Battery Status/Alarm LED (Red/Green)
3. 3.5" TFT LCD touch screen
4. Calendar shortcut button
5. Messaging shortcut button
6. 5-way navigation button
7. Microphone
8. Today shortcut button
9. Contacts shortcut button
10. Power button

Besides the power button, you can turn on the SoMo by pressing the Calendar, Messaging, Today or Contacts button.

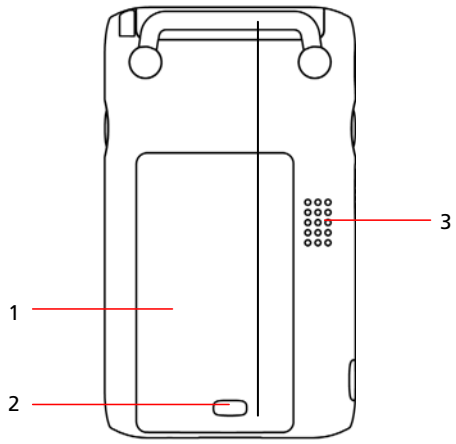
Wireless Status LED

LED Behavior	**Meaning**
Flashing blue	*Bluetooth* radio is on
Flashing green	Wi-Fi radio is on
Flashing blue and green	*Bluetooth* and Wi-Fi radios are on

Battery Status / Alarm LED

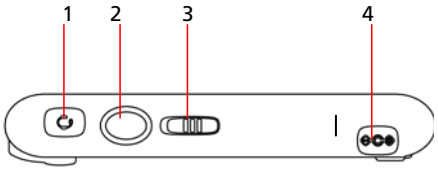
LED Behavior	**Meaning**
Flashing red	Alarm or Low battery notification: <20% charge remaining for 1200 mAh battery <15% charge remaining for 2600 mAh battery
OFF	Running on battery power
Solid red light when connected to charger	Charging
Solid green light when connected to charger	Fully charged

Back



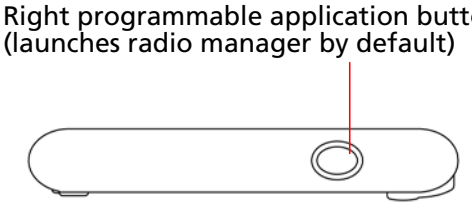
1. Battery cover
2. Battery cover release
3. Speaker

Left

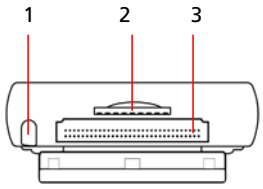


1. Hands-free (headset/microphone) connector (lift rubber cover to access)
2. Left programmable application button (launches Voice Notes voice recording utility by default)
3. Hold switch (disables screen and all buttons). There is a Hold Switch Utility to configure the hold switch, see Chapter 2.
4. DC-in connector (lift rubber cover to access)

Right

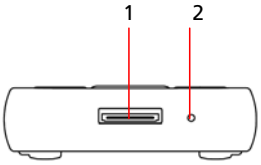


Top (with card slot cover open)



1. Stylus holder and stylus
2. SD (Secure Digital)/SDIO/MMC (MultiMedia Card) slot (lift rubber cover to access)
3. CF (CompactFlash) slot (lift rubber cover to access)

Bottom



1. USB synchronization/host cable connector
2. Soft reset button

SoMo Behavior Under Low Battery Conditions	**Remaining Charge for 1200 mAh Battery**	**Remaining Charge for 2600 mAh Battery**
Low Battery Alert in title bar of Today screen and flashing red LED	20%	15%
Critical Battery Alert in title bar of Today screen and flashing red LED	10%	5%
SoMo will shut down to preserve data until the battery charged. The SoMo should be able to maintain a standby state for 160 hours.	5%	3%

To determine the battery life of the SoMo with your application, please visit: http://www.socketmobile.com/products/handheld-computer/BatteryEstimator/index.html.

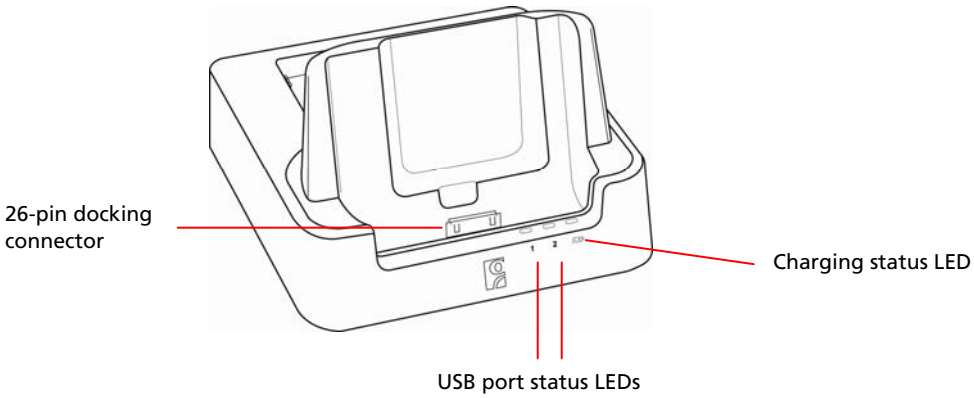
To learn about SoMo battery best practices, please visit: http://ww1.socketmobile.com/Libraries/Documents/Battery_Best_Practices.sflb.ashx

http://support.socketmobile.com/FrontLinesGlobalSupport_Socket_Ext/SocketMobile/Attach/Answer3-0-34_CSN-1006-%20%20Socket%20Customer%20Notice%20-%20Batteries%20discharging%20quickly%20200100524.pdf

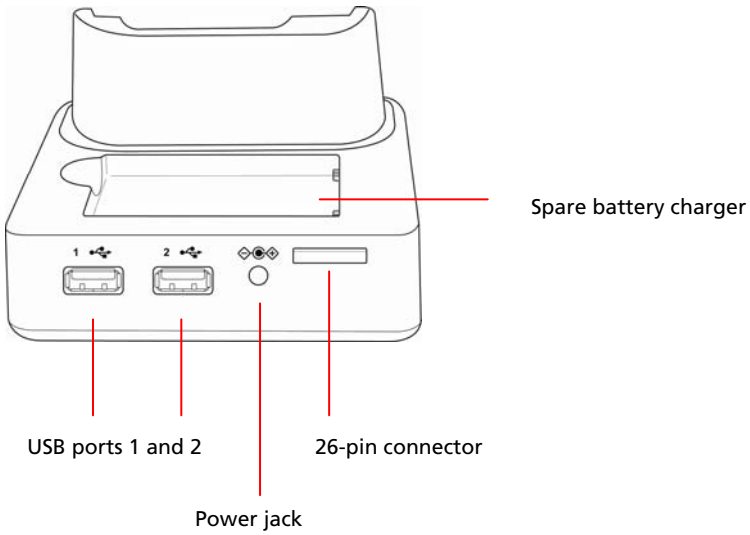
CHARGING/SYNC CRADLE

With two USB ports, the cradle can act as a hub to connect a keyboard, mouse or other device. There is a compartment for charging a spare battery, which can be charged at the same as a SoMo.

Front



Back



If your SoMo does not include a cradle, you can buy one at: http://ww1.socketmobile.com/products/handheld-computers/accessories-hc.aspx?cat=Charging
Socket offers a broad range of charging accessories for the SoMo, including durable charging cradles, multi-bay chargers, car chargers, and more.

Certain USB devices may require additional software or drivers.

2 | GETTING STARTED

CAUTION: TO ENSURE PROPER OPERATION OF YOUR SOMO 650, FOLLOW THE BELOW INSTRUCTIONS PRIOR TO USE. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN YOUR SOMO TEMPORARILY NOT TURNING ON.

STEP 1: INSTALL THE BATTERY

1. Remove the battery cover of the SoMo 650. Press the release button on the bottom of the battery cover with your thumb and slide the battery cover off with your other hand.

2. Place the included battery into the battery compartment, so that the battery's barcode label is face up, near the bottom of the device.

3. Slide the battery cover back into place.

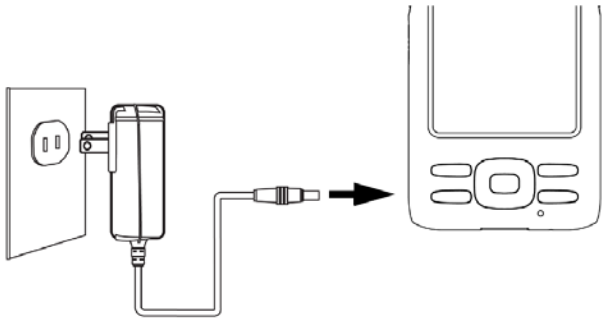
CAUTION: DO NOT PRESS THE BATTERY COVER DIRECTLY DOWN, OR THE BATTERY DOOR SENSING SWITCH COULD BE DAMAGED.

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF BATTERIES ACCORDING TO YOUR LOCAL REGULATIONS FOR BATTERY DISPOSAL.

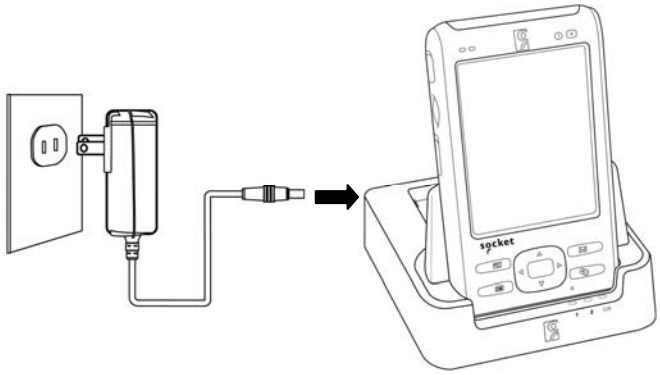
STEP 2: CHARGE THE BATTERY

1. Lift the rubber flap that covers the DC-in connector on the left side of the SoMo.

2. Connect the AC adapter to the DC-in connector.



Alternatively, you can use the cradle, if included with your version of the SoMo 650.



3. Plug the AC adapter into a suitable wall socket.

The SoMo 650 should be charged for 4 hours before first use. Afterwards, charge the device as needed according to its battery level.

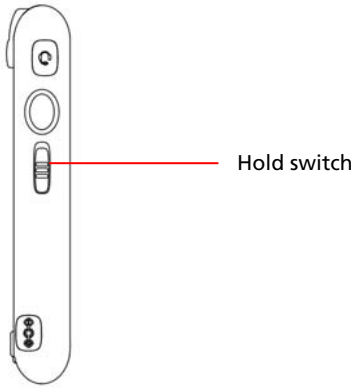
While charging, the power LED of the SoMo will be red. After charging is complete, it will change to green.

CAUTION: WHEN CHANGING BATTERIES, DO NOT REMOVE THE MAIN BATTERY FOR MORE THAN 5 MINUTES UNLESS AC POWER IS APPLIED TO THE UNIT. REMOVING EITHER AC POWER OR THE MAIN BATTERY FOR MORE THAN 5 MINUTES COULD RESULT IN THE SOMO FAILING TO POWER ON AFTER CHANGING THE BATTERY.

STEP 3: SET UP YOUR SOMO 650

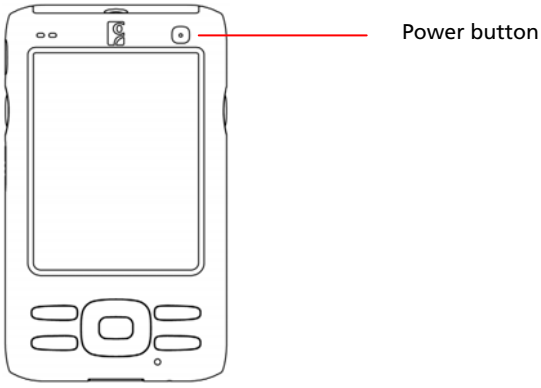
NOTE: Make sure the SoMo 650 is fully charged before proceeding.

1. Slide the hold switch on the left side of your SoMo 650 up to the unlocked position.



IMPORTANT! SLIDE THE SWITCH UP, OR THE DEVICE WILL NOT WORK!

2. Turn on your SoMo 650 by pressing the small power button on the front (top right-hand corner).



3. Follow the onscreen instructions to set up your SoMo 650.

STEP 4: INSTALL SYNCHRONIZATION SOFTWARE ON HOST PC

Do not connect your SoMo 650 to your host PC until the synchronization software has been installed on the PC.

Windows 7/Vista

1. Download the Windows Mobile Device Center software from: http://www.microsoft.com/windowsmobile/en-us/downloads/microsoft/device-center-download.mspx
2. Follow the instructions on the webpage to install the software.

Refer to the Microsoft website for information on how to use the software.

Windows XP/2000

ActiveSync version 4.2 or greater is required to connect to Windows Mobile 5.0, and version 4.5 or greater is required to connect to Windows Mobile 6.

1. Close any programs running on your host PC.
2. Insert the SoMo 650 Companion CD into the computer's CD-ROM drive.
3. The CD's welcome page will appear. Click **Next**.

The welcome page may be different for different SoMo versions.

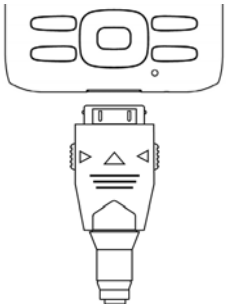
4. Follow the instructions to install Microsoft ActiveSync.
5. After installation, the ActiveSync icon will appear on your system tray (usually the lower right corner of the screen).

Refer to the ActiveSync online Help for information on how to use the software. To restart this setup program, re-insert the CD into the CD drive.

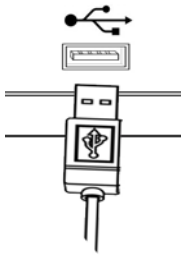
STEP 5: CONNECT THE SOMO TO HOST PC

Connect with the Sync Cable

1. Plug the USB sync cable into the connector on the bottom of your SoMo 650.



2. Plug the other end of the cable into a USB port of your PC.

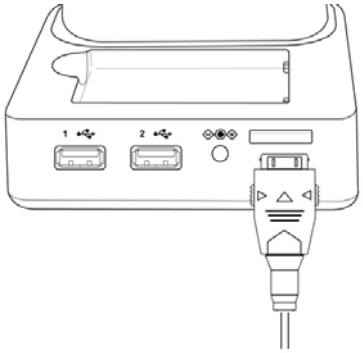


It is recommended that you also connect the AC adapter.

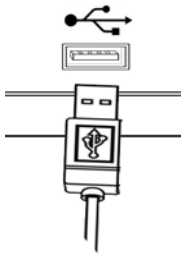
Connect with the Cradle

1. Insert the SoMo 650 into the cradle.

2. Use the USB sync cable to connect the cradle to a host computer.



3. Plug the other end of the cable into a USB port of your PC.



It is recommended that you also connect the AC adapter.

If you want to charge the SoMo via USB and have Windows Mobile 6 Service Pack 7 or later, make sure USB charging is enabled. Tap Start | Settings | System | Power Plus | Advanced. Select the option Enable USB charging and tap ok.

STEP 6: SET UP YOUR DEVICE PARTNERSHIP

Windows 7/Vista

1. When you connect your SoMo 650 to your computer for the first time, the Windows Mobile Device Center should automatically start.

Windows Mobile Device Center
Home
Windows Mobile
Set up your device
Get Outlook contacts, calendar, e-mail and other information on your device.
Connect without setting up your device
Connected

2. Click **Set up your device**.
3. Select the information you want to synchronize and click **Next**.
4. Follow the instructions in the remaining screens to complete the setup.

Windows XP/2000

1. When you connect your SoMo 650 to your computer for the first time, the New Partnership wizard should automatically launch.

New Partnership
Set Up a Partnership
This wizard helps you establish a partnership between your mobile device and this computer. You can set up either a standard partnership to synchronize data between your device and this computer, or a guest partnership to simply transfer data between your device and this computer.
What kind of partnership would you like to establish between your device and this computer?
Standard partnership
I want to synchronize data between my device and this computer, keeping data such as e-mail and calendar items up-to-date in both places.
Guest partnership
I want to only copy and move information between my device and this computer, add and remove programs, or restore a backup image on a device whose memory has been reset. I do not want to synchronize data.
< Back
Next >
Cancel
Help

NOTE: If the wizard does not automatically appear, click Start | All Programs | Microsoft ActiveSync.

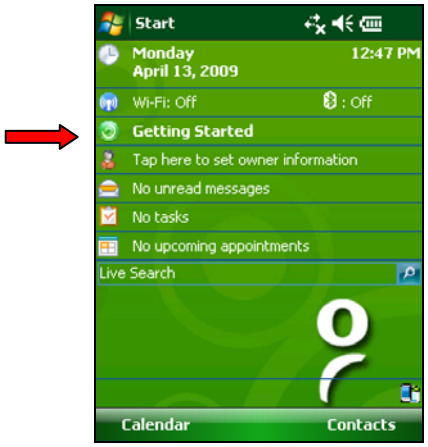
2. Follow the setup wizard to set up the partnership. Once completed, the first synchronization will start automatically.
3. After the synchronization is complete, you will see that the Calendar, Contacts and Tasks on your SoMo 650 have been updated.

   The next time you wish to use the synchronization software, just plug your SoMo 650 into your computer. The software will open automatically and update your device.

GETTING STARTED WIZARDS

Windows Mobile 6.1 only

1. In the Today screen, tap **Getting Started**.



2. A list of wizards will appear. Some are generic for Windows Mobile 6.1, but some are specifically for the SoMo 650:

The following list shows some of the latest wizards included with Windows Mobile 6 Service Pack 8.

- Register SoMo 650
- Install Microsoft Windows Mobile Updates
- Set up e-WFC
- Set up SocketScan 10
- Configure hold switch
- Set up Connect!Agent
- Sprite Backup Trial
- MobiScan Rapid Configuration Tool
- Set up Data Capture Triggers
- Set up WAN connections
- Configure CF/SD slots
- Additional wizards generic to Windows Mobile 6.1 devices

Tap on a title to launch the wizard.

Register SoMo 650

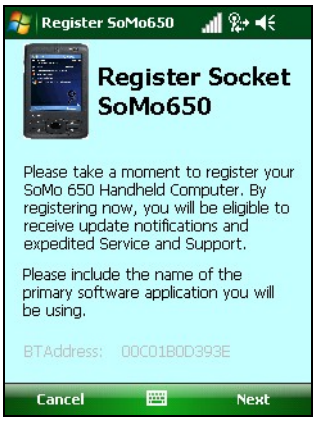
Socket highly recommends that all customers register their SoMo devices. Registered users benefit from update notifications and expedited service and support.

1. In the list of Getting Started wizards, tap **Register SoMo 650**.

2. In the next screen, tap on the link.

Getting Started
Register your SoMo® 650
Registering your SoMo 650 makes you eligible to receive update notifications and expedited Service and Support. Internet Connectivity is required to complete your registration.
Tap to register your SoMo 650 now.
Back

3. The registration wizard will begin. **Make sure the SoMo has Internet access and follow the wizard to register your SoMo.**


Register SoMo650
Register Socket SoMo650
Please take a moment to register your SoMo 650 Handheld Computer. By registering now, you will be eligible to receive update notifications and expedited Service and Support.
Please include the name of the primary software application you will be using.
BTAddress: 00C01B0D393E
Cancel
Next

Install Microsoft Windows Mobile Updates

In most cases, you will not need to use this utility.

1. In the list of Getting Started wizards, tap **Install Microsoft Windows Mobile Updates**.

2. Tap on the links for the updates you wish to install.

   - Microsoft Update (KB980993) – For improving security of Internet Explorer Mobile 6 to prevent remote code execution
   - Microsoft Certificates Update (KB2524375) –For preventing spoofing

Getting Started
Install Microsoft Windows Mobile updates
The following operating hotfixes are available:
Tap to install the Microsoft Update (KB980993) now.
Tap to install the Microsoft Certificates Update (KB2524375) now.
Back

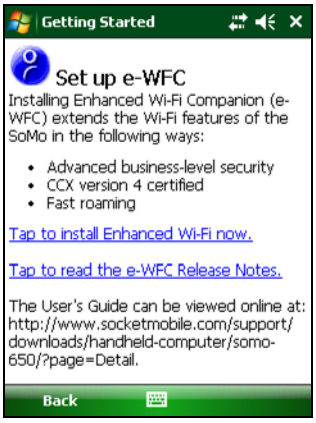
Set up Enhanced Wi-Fi Companion (e-WFC)

By default, the SoMo has Wi-Fi Companion (WFC) installed. For SoMo devices running Windows Mobile 6 Service Pack 4 or later, Enhanced Wi-Fi Companion (e-WFC) is also pre-loaded but must be manually installed.

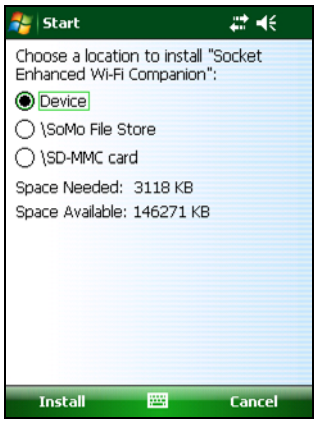
Enhanced Wi-Fi Companion offers many benefits, including advanced authentication (including PEAP-GTC, EAP-TTLS, LEAP, EAP-FAST); WMM including transmit power control and CCKM; Cisco CCX 4.0 certification; and a Socket profile editor with advanced functionality.

1. In the list of Getting Started wizards, tap **Set up e-WFC**.

2. To install the application, tap on the first link.


Getting Started
Set up e-WFC
Installing Enhanced Wi-Fi Companion (e-WFC) extends the Wi-Fi features of the SoMo in the following ways:
• Advanced business-level security
• CCX version 4 certified
• Fast roaming
Tap to install Enhanced Wi-Fi now.
Tap to read the e-WFC Release Notes.
The User's Guide can be viewed online at: http://www.socketmobile.com/support/downloads/handheld-computer/somo-650/?page=Detail.
Back

3. The device will begin to install the software. When prompted, choose where you will like the software installed. Tap **Install**.



If you install the software in SoMo File Store, it will remain installed after a hard reset, but not after a ROM flash.

4. After installation, you will be prompted to restart the SoMo. Tap **Ok**.

Set up SocketScan 10

SocketScan 10 software is for Socket CHS Series 7 v3 barcode scanners.

1. In the list of Getting Started wizards, tap **Set up SocketScan 10**.

2. To install the application, tap on the link.

Getting Started
Set up SocketScan 10
Installing SocketScan 10 adds support for the following Bluetooth scanners:
• CHS 7X, 7XRx
• CHS 7P (v3), 7M (v3), 7E (v3)
Tap to install SocketScan 10 now.
Back

3. Follow the remaining screens to install the software.

Configure hold switch

The Hold Switch Utility lets you change the default behavior of the hold switch.

ROM v1.1 and later includes the utility. For previous ROMs, download the utility from: http://www.socketmobile.com/support/downloads/handheld-computer/somo-650/

When the hold switch is activated, any connections or programs running on the SoMo will remain active. By default the screen will turn off.

By default, the SoMo automatically suspends according to settings saved in the Power applet. To access the applet, tap Start | Settings | System tab | Power.

1. In the list of Getting Started wizards, tap **Configure hold switch**.

2. Tap on the link in the wizard to access the Hold Switch Utility.

Getting Started
Configure hold switch
You can configure the hold switch to do more than just make your device appear dead.
The screen can be kept alive, and applications can be launched if desired.
Change hold switch settings in Settings > Hold Switch.
Back

Alternatively, tap **Start | Settings | System tab | Hold Switch**.

3. Use the utility to configure your settings.

- **Leave screen enabled**: Select to keep the screen on when the hold switch is activated. A dialog will confirm the hold switch is activated. Tapping **ok** or deactivating the hold switch will close the dialog.

  When the SoMo is reset, this option is automatically re-enabled.

- **Disable backlight**: Select to keep the screen on but disable the backlight, recommended for conserving battery life.

- **Disable auto-suspend**: Select to keep the SoMo alive when the hold switch is activated, regardless of settings chosen in the Power applet.

  Use this option with caution to avoid accidental battery depletion.

- **Launch program when switch is activated/deactivated**: Use the menu to select a program for the SoMo to automatically launch when the hold switch is activated (in the down position) or deactivated (in the up position).

4. After entering your settings, tap **ok**.

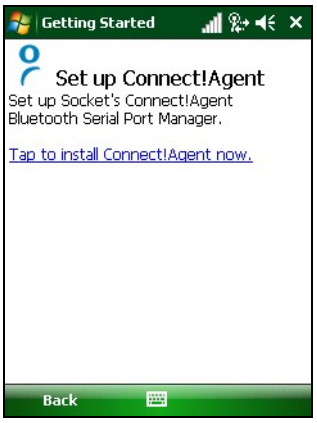
Set up Connect!Agent

Connect!Agent software is compatible with the Socket CHS Series 7 v1 or v2 and the Socket CRS Series 9.

1. In the list of Getting Started wizards, scroll down and tap **Set up Connect!Agent**.

2. Tap on the link. Follow the on-screen instructions to install the software.

.



Sprite Backup Trial

SoMo devices running Windows Mobile 6 Service Pack 5 or later include a free 10-day trial of Sprite Backup software.

1. In the list of Getting Started wizards, tap **Sprite Backup Trial**.

2. Tap on the first link. Follow the on-screen instructions to install the software.

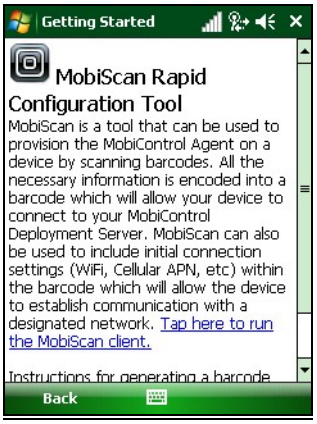
Getting Started
Sprite Backup Trial
This is a 10 day trial of spritebackup. The world's favourite mobile backup solution.
Full Backup
Exclusive 1step Backup
Off-device Backup
Automatically Scheduled Backups
Tap to install spritemobile.
The Desktop install component can be found at: http://spritesoftware.com.
Back

For more information about Sprite Backup, please visit:
http://www.spritesoftware.com/products/sprite-backup/full-edition

MobiScan Rapid Configuration Tool

1. In the list of Getting Started wizards, tap **MobiScan Rapid Configuration Tool**.

2. Tap on the link. Follow the on-screen instructions to install the software.


Getting Started
MobiScan Rapid Configuration Tool
MobiScan is a tool that can be used to provision the MobiControl Agent on a device by scanning barcodes. All the necessary information is encoded into a barcode which will allow your device to connect to your MobiControl Deployment Server. MobiScan can also be used to include initial connection settings (WiFi, Cellular APN, etc) within the barcode which will allow the device to establish communication with a designated network. Tap here to run the MobiScan client.
Instructions for generating a barcode
Back

For more information about SOTI MobiScan, please visit:
http://soti.net/mc/help/Content/Manager/MobiScan.htm

Set up Data Capture Triggers

For instructions on how to set up data capture triggers for Socket barcode scanners or RFID readers, please refer to Chapter 6.

Set up WAN Connections

For instructions on how to set up WAN Connections with the SoMo 650 Back Pack wireless broadband ExpressCard adapter (sold separately), please refer to Chapter 7.

Configure CF/SD slots

In most cases, you will not need to use this utility. If you insert a memory card into the SoMo and cannot access data from the card after the device suspends/ resumes, you can use the utility to leave the card slot enabled even when the device has suspended.

1. In the list of Getting Started wizards, tap **Configure CF/SD slots**.
2. Check the appropriate box to enable a card slot after the SoMo suspends/ resumes. Tap **ok**.

Settings
ok
CF/SD Slots
Programs that access data on memory cards may fail after suspend/resume. Keeping slots enabled MAY allow such software to run properly.
Leave CF slot enabled
Leave SD slot enabled
CAUTION: If slots are left enabled, do NOT swap memory or I/O cards while the device is suspended!
About

CAUTION: ONLY LEAVE A SLOT ENABLED TO INSERT A MEMORY CARD. DO NOT LEAVE A SLOT ENABLED TO INSERT A SOCKET CF / SD DEVICE OR OTHER I/O CARD.

CAUTION: LEAVING A SLOT ENABLED WHEN THE SOMO IS NOT IN USE CAN DEPLETE THE BATTERY.

CAUTION: IF YOU LEAVE A SLOT ENABLED, WHEN THE SOMO IS POWERED ON, DO NOT REMOVE OR INSERT A CARD UNLESS IT IS A MEMORY CARD.

3 | USING THE SOMO 650

This chapter explains how to use your SoMo 650 through its buttons, the hold switch, stylus, Start menu, online Help, and the Radio Manager.

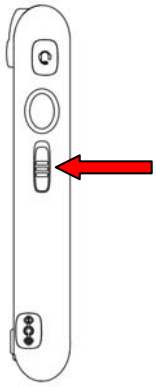
STYLUS

You can use the stylus in three ways.

- **Tap an item**: Use to select an option, similar to left-clicking a mouse.
- **Tap and hold an item**: Reveals a submenu, if available. Similar to right- clicking a mouse.
- **Drag**: Hold the stylus against the screen and drag to highlight multiple items, or to move the position of an item. Similar to left-clicking and dragging a mouse.

A tethered stylus is also available online at: http://ww1.socketmobile.com/products/handheld-computers/accessories-hc.aspx?cat=Input

HOLD SWITCH



The hold switch on the left side of the SoMo 650 can be used to prevent accidental input by disabling all buttons and the screen. Any applications or wireless connections running on the device will remain active.

To put your device on hold, move the switch in the down position.

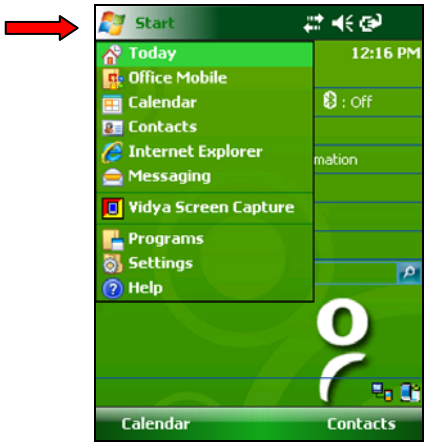
The hold switch is not related to the software lock function accessible from the Today screen.

When the hold switch is activated, by default, the screen will turn black, and the screen and all buttons on the sides and front of the SoMo will be disabled, including the power button.

To enhance your user experience, Socket has a Hold Switch Utility that enables you to configure the hold switch settings. (See Chapter 2.)

START MENU

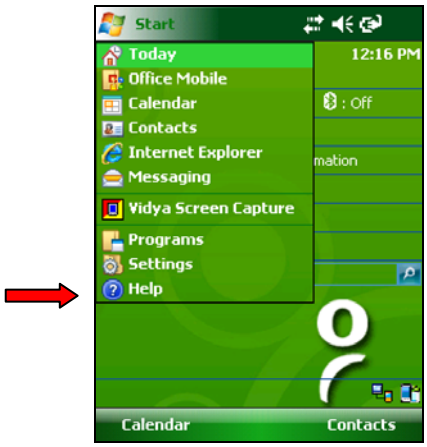
From the Start menu, you can access programs, settings and Help topics. The Start menu can be accessed by tapping .



ONLINE HELP

Your SoMo 650 contains online help files. These can be accessed in two main ways:

1. Tap > **Help** > **Contents** for a list of Help topics.



2. To access Help for any particular application, open the application and then tap > **Help**.

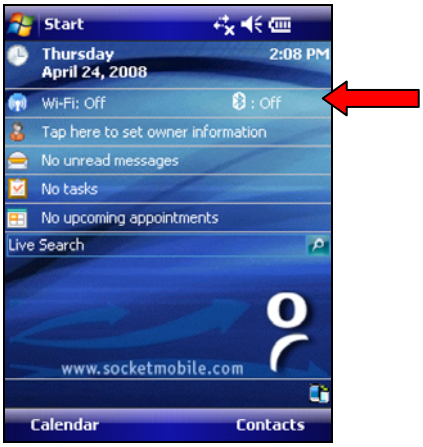
Alternatively, you can tap on the Help icon if your application has one.

WIRELESS RADIO MANAGER

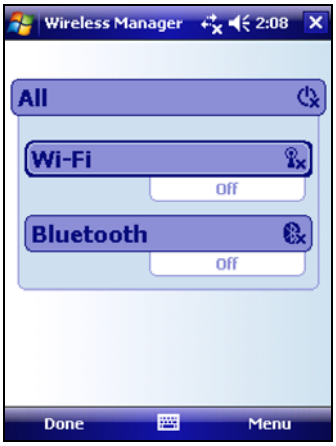
Microsoft Wireless Manager

SoMo devices running Windows Mobile 6 include the Microsoft Wireless Manager by default. If you install Enhanced Wi-Fi Companion, the Socket Radio Manager will appear instead (see next page).

1. Open the Microsoft Wireless Manager. Press the button on the right side of the SoMo 650. Alternatively, tap the Wi-Fi and *Bluetooth* status line in the Today screen.



2. In the Wireless Manager, an "x" appears next to the Wi-Fi or *Bluetooth* icon when the radio is off. Tap on the button to turn on the radio.



Wi-Fi Companion software automatically launches after Wi-Fi is turned on.

Socket Radio Manager

SoMo devices running Windows Mobile 5 include the Microsoft Wireless Manager by default. The Socket Radio Manager also appears on SoMo devices running Windows Mobile 6 with Enhanced Wi-Fi Companion installed.

1. Open the Socket Radio Manager. Press the button on the right side of the SoMo 650. Alternatively, tap the Wi-Fi and *Bluetooth* status line in the Today screen.

2. In the Radio Manager, a red "x" appears on the *Bluetooth* or Wi-Fi button when the radio is off. Tap on the button to turn on the radio.

Wi-Fi Companion software automatically launches after Wi-Fi is turned on.

Flight mode turns off Bluetooth and Wi-Fi. When flight mode is disabled, the previously running wireless radio(s) will turn on again.

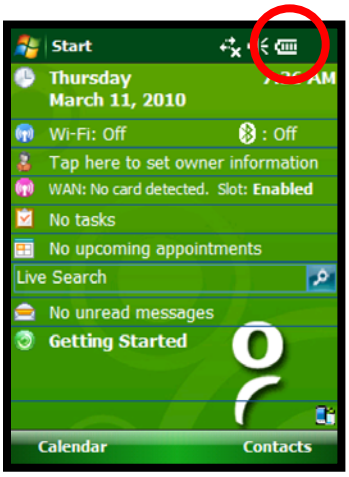
SoMo 650 Power Plus Battery Friendly® Utility

This utility provides advanced power management and monitoring and is available on SoMo devices running Windows Mobile 6 Service Pack 6 or later.

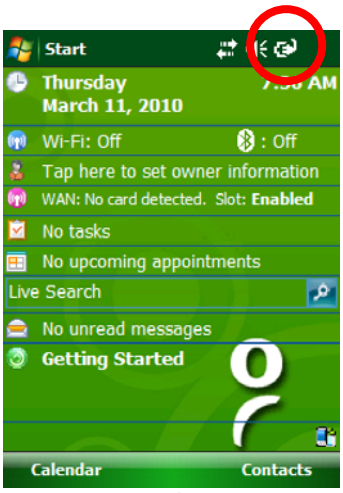
With MCU firmware 2.7 or later, the utility provides detailed information on SoMo performance. To determine your MCU version, tap Start | Settings | System tab | System info | OS Version.

To learn more about the utility, please visit: http://www.socketmobile.com/support/downloads/handheld-computer/somo-650/?page=Detail

1. In the Today screen, tap on the Battery icon or Power Plug icon (these icons indicate whether the SoMo is running on battery power or connected to AC power).



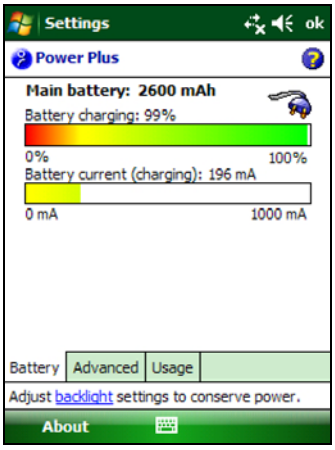
Battery icon



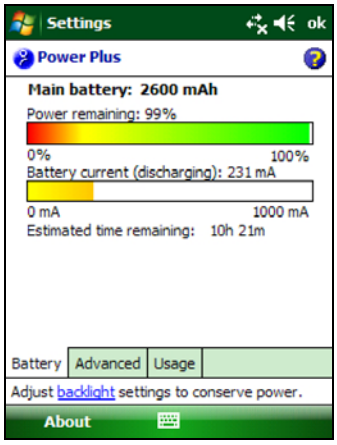
Power Plug icon

Alternatively, tap **Start | Settings | System tab | Power Plus**.

2. The Power Plus utility will appear, displaying the Battery screen.



Battery charging



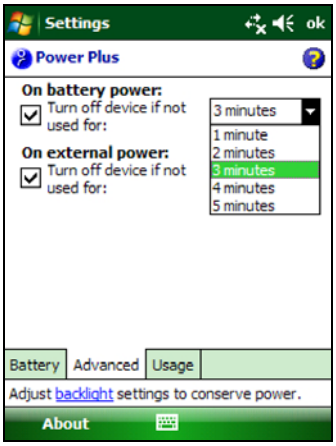
Battery discharging

Current usage typically ranges from 150 mA to over 450 mA depending on how the SoMo is being used.

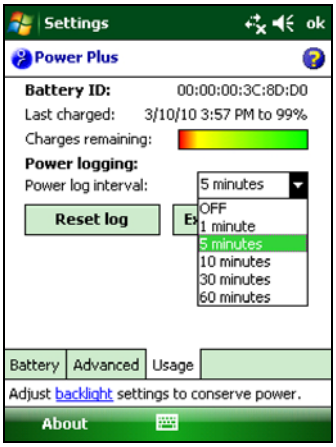
After a suspend/resume, it can take up to 30 seconds for the applet to make a reasonable determination of time remaining.

If a battery is changed and the SoMo reset, it may take several minutes to report the battery current usage and estimated time remaining.

3. Tap on the **Advanced tab**. If desired, configure the SoMo to automatically turn off if not used for a specific amount of time.



4. Tap on the **Usage tab**. Information about the battery ID, last charging session, and charge remaining is provided.



If desired, enable a power log:

- **Power log interval**: Select the duration of each power logging interval.
- **Reset log**: Tap to clear the power log data.
- **Export CSV file**: Tap to export the power log as a CSV file.

5. Tap **ok**.

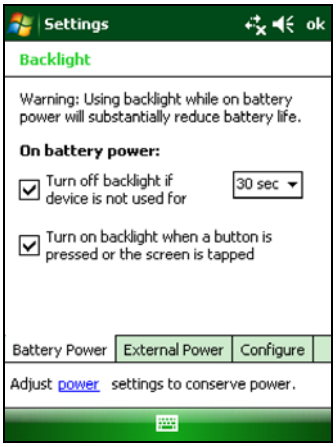
To determine the battery life of the SoMo with your application, please visit: http://www.socketmobile.com/products/handheld-computer/BatteryEstimator/index.html.

BACKLIGHT AND POWER SETTINGS

You may want to adjust the backlight and power settings to maximize the battery life of your SoMo 650.

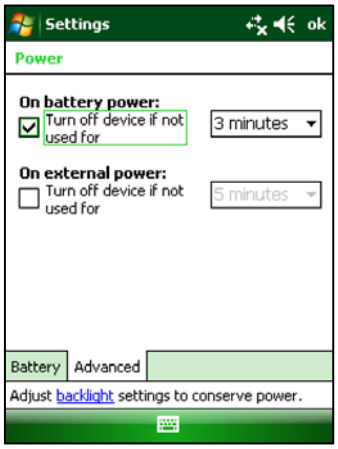
1. Tap **> Settings > System tab** > **Backlight**.

2. The Backlight utility will appear. Adjust the settings as desired and tap **ok**.


Settings
ok
Backlight
Warning: Using backlight while on battery power will substantially reduce battery life.
On battery power:
Turn off backlight if device is not used for
30 sec
Turn on backlight when a button is pressed or the screen is tapped
Battery Power
External Power
Configure
Adjust power settings to conserve power.

3. In the Settings screen, tap **Power**.

4. Tap on the **Advanced** tab and adjust the settings as desired. Tap **ok**.

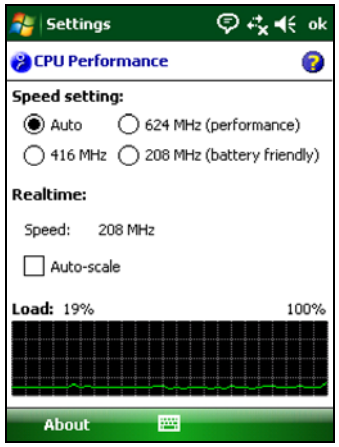


CPU PERFORMANCE UTILITY

The CPU Performance utility allows you to choose a fixed processor speed based on your own criteria of performance versus battery life. This utility is available with SoMo devices running Windows Mobile 6 Service Pack 6 or later.

1. Tap **> Settings > System tab** > **CPU**.

2. The CPU Performance utility will appear, displaying the real-time processor speed and a graph of the current processor load percentage.



3. If desired, adjust the speed setting.

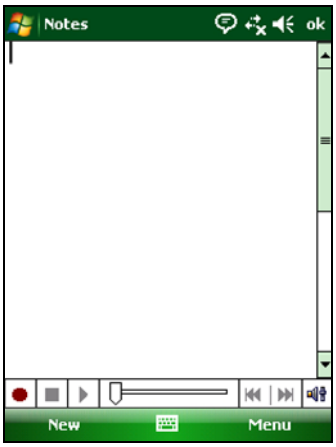
   - **Auto**: Select for the SoMo to monitor processor usage and adjust the processor speed accordingly.
   - **624 MHz**: Select for the best performance but least battery life.
   - **416 MHz**: Select for a good balance between performance and battery life.
   - **208 MHz**: Select for the best battery life but slower processor performance.

   You can also adjust how the load graph appears:
   - **Auto-scale**: Select to change the scaling shown in the load graph.

4. Tap **ok**.

VOICE RECORDER

By default, the left programmable application button is set for Notes, which includes voice recording capability. In Notes, tap on the red circle icon to begin recording sound.



Note: You can manually access Notes by tapping: ***> Programs > Notes****.*

Note: If the toolbar does not appear, tap ***Menu | View Recording Toolbar****.*

ADDING A USB KEYBOARD/MOUSE

If you are using the SoMo 650-M, you can enter information by docking the SoMo in the cradle and using the cradle's two USB ports to connect a keyboard and/or mouse.

Socket also offers an optional USB host cable and Y cable, sold separately at; http://ww1.socketmobile.com/products/handheld-computers/accessories-hc.aspx?cat=Charging.

4 | Wi-Fi Companion

Wi-Fi Companion (WFC) is a powerful and easy-to-use utility for managing Wi-Fi connections from your SoMo 650 handheld computer. Intuitive graphics display connection properties at a glance. Tap on icons to quickly perform a variety of networking tasks. For advanced users, the software also offers advanced diagnostic tools and connection statistics.

Enhanced Wi-Fi Companion Software (e-WFC) offers the following advantages over WFC:

- Advanced authentication (including PEAP-GTC, EAP-TTLS, LEAP, and EAP-FAST)
- WMM including transmit power control and CCKM
- Cisco CCX 4.0 certification
- Socket profile editor with advanced functionality

Software	OS on SoMo	Installation status
Wi-Fi Companion	All	Pre-installed on device
Enhanced Wi-Fi Companion	Windows Mobile 5	Not compatible
	Windows Mobile 6 prior to Service Pack 4	Not included on device. Register SoMo at http://support.socketmobile.com/ and request a free copy of the software.
	Windows Mobile 6 Service Pack 4 or later	Pre-loaded on device but optional to install

To view a chart comparing WFC and e-WFC, please download the white paper: http://www.socketmobile.com/pdf/techbrief/e-WFC_white-paper.pdf

For instructions on how to install e-WFC, please refer to Chapter 2.

This chapter primarily refers to standard WFC and shows WFC screens. Instructions and screens for e-WFC will be equivalent unless otherwise noted.

Socket now offers two WLAN configuration options for the SoMo: Persistence Mode and Fast Roaming. To learn more, read our white paper: http://www.socketmobile.com/pdf/techbrief/somo-wifi-persistence-mode_white-paper.pdf

Additional Documentation

This chapter covers basic instructions for using Wi-Fi Companion on the SoMo 650. For detailed instructions, please refer to the *User's Guide* available in the CD and online at:
http://www.socketmobile.com/support/downloads/

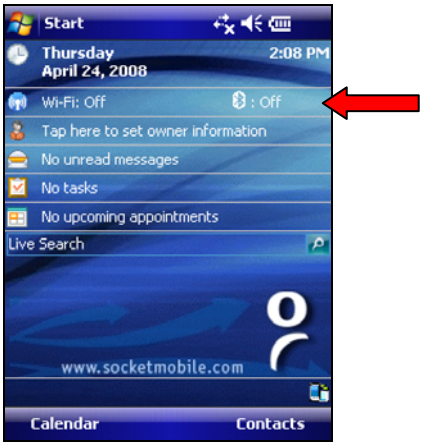
Useful Links

Registered users can download software updates free after logging into:
http://support.socketmobile.com

TURNING ON THE WI-FI RADIO

Wi-Fi Companion automatically launches after you turn on the Wi-Fi radio.

1. Open the Radio Manager. Press the button on the right side of the SoMo 650. Alternatively, you can tap on the Wi-Fi and *Bluetooth* status line in the Today screen.



2. In the radio manager, an "x" will appear on the Wi-Fi button to indicate that the Wi-Fi radio is off. Tap on the button to turn on the radio. The "x" will disappear.

Socket Radio Manager

Microsoft Wireless Manager

3. The Wi-Fi status icon will appear at the top of the screen. The icon varies based on your connection status. Tap on the icon to view the main screen of Wi-Fi Companion. To view the different versions of the icon, please refer to the chart on the next page.

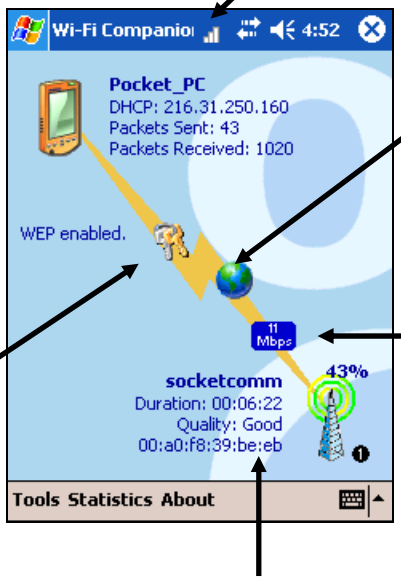
Socket Radio Manager

Microsoft Wireless Manager

If you tap Enable Flight Mode (Socket Radio Manager) or All (Microsoft Wireless Manager), the Bluetooth and Wi-Fi radios will both be disabled. The manager will remember which wireless radio(s) were running, so when you later tap Disable Flight Mode or All, the same one(s) will turn on again.

MAIN SCREEN OF WI-FI COMPANION

The screen content varies depending on your connection status.



Wi-Fi status icon. Tap to access this screen from outside the utility.

Your device properties.
- Device name
- IP address
- Packets sent and received

The icon always appears regardless of connection status. Tap to view more IP addresses or access the radio manager.

Valid IP address. Tap to access email, the Internet, ping or trace route.

Data rate. Tap to view signal strength and data rate distribution.

Encryption status. Tap to access a certificate management utility for WPA or 802.1x if needed.

Access point/remote device properties.
- SSID (network name)
- Connection duration
- Signal quality rating and percentage
- MAC address (also known as BSSID)
- Channel number (in black circle)

Tap for Wi-Fi Finder.

For Enhanced Wi-Fi Companion, the screen has a green background.

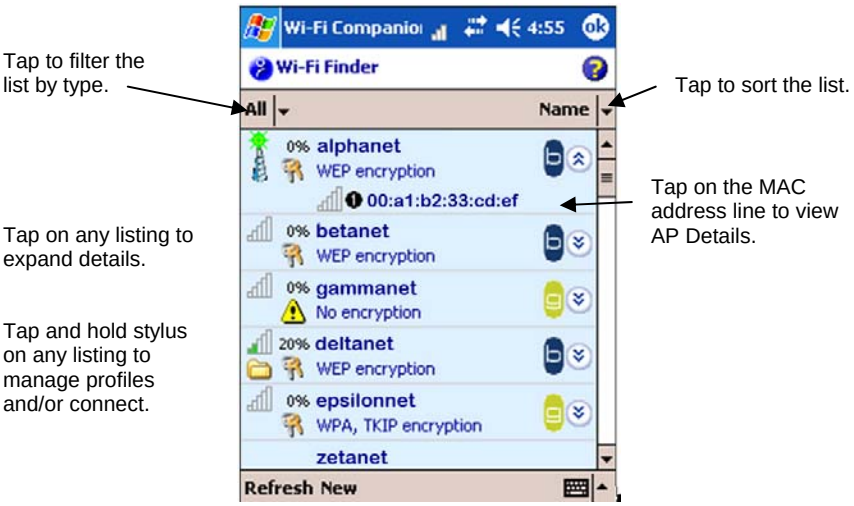
WI-FI STATUS ICON

The icon appears at the top of every screen when Wi-Fi Companion is running.

	Associated or Connected. Number of bars indicates signal strength.
	Networks available.
	Searching for networks.
	Networks out of range but configured.

Wi-Fi Finder

The Wi-Fi Finder displays a list of WLAN networks found in range. To access the Wi-Fi Finder, tap on the large tower icon in the bottom right corner of the main screen of Wi-Fi Companion.



Wi-Fi Finder Icons

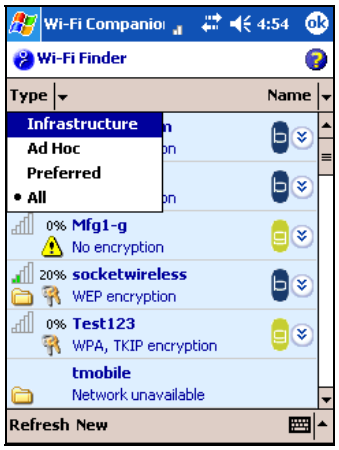
	Current connection
	Signal strength of strongest AP (access point)/ad hoc radio
	WEP encryption, WPA (PSK), WPA (TKIP), WPA2 or 802.1x
	No encryption
	Channel number
	Profile saved
	802.11b, 802.11g

FINDING AND CONNECTING TO A WLAN

Ask your network administrator for the necessary security settings for your WLAN. If the WLAN uses 802.1x, WPA or WPA2, you need to install authentication certificate(s) before you can connect. Refer to the *Wi-Fi Companion User's Guide* for instructions on the Socket certificate utility.

1. In the main screen of Wi-Fi Companion, tap on the tower icon, or tap **Tools | Wi-Fi Finder**.

2. Wi-Fi Finder will appear, listing WLANs detected in range. Tap on any WLAN in the list to view additional properties.

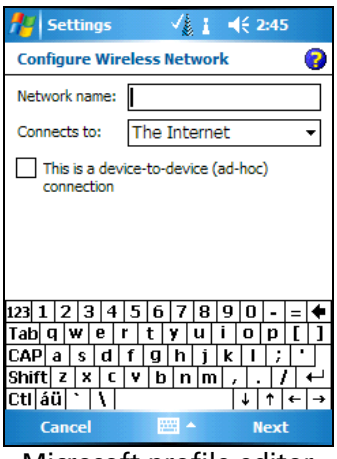


If desired, tap on the **Type** or **Sort by** drop-down menus to change how the list is displayed.

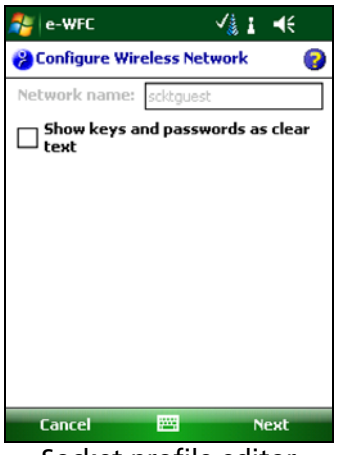
If your WLAN is not listed, tap **Refresh** at the bottom of the screen.

3. If Wi-Fi Finder cannot find your WLAN because its SSID (network name) is hidden, tap **New** at the bottom of the screen.

A wizard will launch to help you create a profile for your network. Complete the wizard, entering the security settings obtained from your network administrator.



Microsoft profile editor



Socket profile editor

For Wi-Fi Companion, the Microsoft profile editor (Wireless Zero Config) will launch.

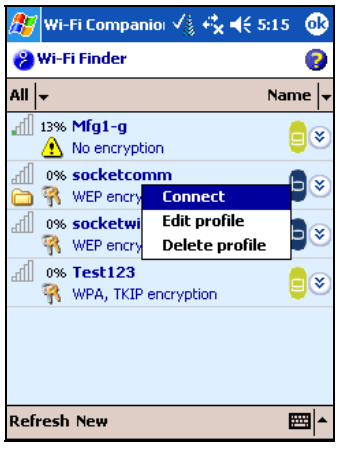
For Enhanced Wi-Fi Companion, a Socket profile editor will launch with dynamic configuration and advanced security options.

4. If your WLAN does not have a profile (i.e., no folder icon is shown next to it), tap and hold your stylus on the WLAN in the list. In the pop-up menu, tap **Get Connected**.

A wizard will launch to help you create a profile for the selected SSID. Complete the wizard, entering the security settings obtained from your network administrator.

5. After a profile is saved, if the WLAN is in range, the SoMo will automatically try to connect to it.

   To connect to another network in the list, tap and hold your stylus on the WLAN. In the pop-up menu, tap **Connect**.



5 | SocketScan 10 for CHS Series 7 Barcode Scanners

SocketScan 10 software sends data from your Socket *Bluetooth* Cordless Hand Scanner (CHS) Series 7 v3 into any application running on the SoMo 650. This lets you use the CHS without having to program custom applications. The software comes pre-loaded on the SoMo 650 running Windows Mobile 6 Service Pack 8 or later but needs to be installed.

These instructions do not apply to version 1 or 2 of the CHS, nor to the CRS Series 9.

These instructions are for using the CHS in Bluetooth SPP mode. For Bluetooth HID instructions, please refer to your CHS manual.

Additional Documentation

This chapter covers basic instructions for using SocketScan 10 on the SoMo 650 with a CHS v3. For detailed instructions, please refer to the appropriate *User's Guide* for your type of CHS:

- 1D versions (7C, 7E, 7M, 7P, 7NRx): http://www.socketmobile.com/pdf/data-collection/chs-series7-v3_ug.pdf
- 2D versions (7X, 7XRx, 7Xi, 7XiRx): http://www.socketmobile.com/pdf/data-collection/chs-7x_ss10-ug.pdf

Useful Links

Registered users can download free software updates by logging into: http://support.socketmobile.com

SOCKETSCAN 10 ICONS

The icon indicates whether SocketScan 10 is connected to your CHS and ready to read data. The icon appears at the bottom of the Today screen.

Icon	Meaning
	CHS not connected.
	CHS connected and ready to scan barcodes

STEP 1: CHARGE THE CHS

Refer to your CHS manual for hardware preparation instructions. You may also want to attach the tether.

If you have a 1D version of the CHS (7C, 7E, 7M, 7NRx or 7P) there are some extra steps you need to perform:

Change the CHS to SPP mode. Power on the CHS. Print out this page and scan the barcode below. Do not scan this barcode on your computer screen.

Use the *Bluetooth* software to start a device search and pair with the CHS.

- Press the right side application button, which by default launches the wireless manager.
- If *Bluetooth* is not enabled, tap on the *Bluetooth* button.
- Tap **Options | Bluetooth Settings**
- At the bottom of the screen, tap **Add**.
- In the list of found devices, select the **CHS**.
- Complete the remaining screens. If prompted for a passkey, enter **0000** (four zeroes).
- After pairing, tap on the **COM Ports** tab. Add an outgoing COM port for the CHS.

STEP 2: INSTALL SOCKETSCAN 10

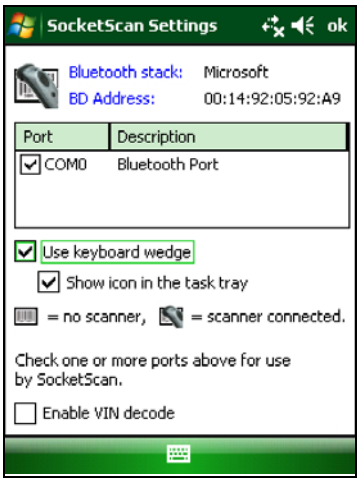
1. In the Today screen, tap **Getting Started**.
2. In the list of Getting Started wizards, tap **Set up SocketScan 10**.
3. Tap the link to install the software.

STEP 3: PAIR THE CHS WITH THE SOMO

1. Tap **Start | Programs | SocketScan 10 folder | SocketScan 10** .

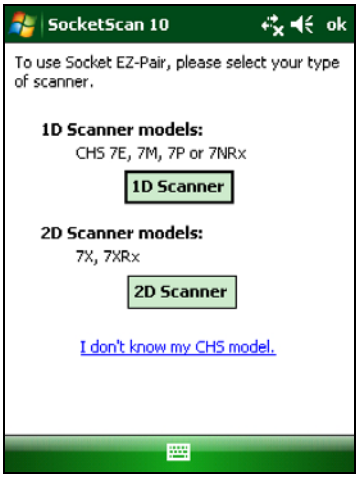
2. In the Today screen, tap on the SocketScan 10 icon in the task tray. In the pop-up menu, tap **SocketScan 10 Settings**.

3. Make sure an available COM port is selected. Tap **ok**.



4. In the Today screen, tap on the SocketScan 10 icon in the task tray. In the pop-up menu, tap **EZ Pair**.

5. Tap the type of CHS barcode scanner you have.



   a. If you have a **2D Scanner**, the next screen will show a barcode. Power on the CHS and scan the barcode. If prompted for a passkey, enter **0000** (four zeroes).

   b. If you have a **1D Scanner**, in the next screen select your CHS and tap **Pair**.

6. After they pair and connect, the CHS will beep once. The task tray icon will also change .

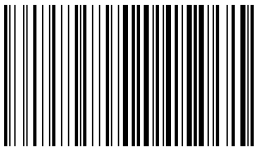
a. If you have a 1D scanner, the CHS will disconnect from the SoMo, indicated by 2 beeps. The CHS will then reconnect to the SoMo, indicated by a beep.

STEP 4: START APPLICATION

Start the application that you want to enter data into (e.g., Excel Mobile). From the Today screen, tap **Start | Programs** and select your program. Make sure a document, spreadsheet or form is open in your program. Place the cursor where you want data from the next scan to be entered.

STEP 5: SCAN BARCODES

1. Press the trigger button to scan a barcode. Please refer to your scanner manual for the correct technique. Make sure the scanning beam covers the entire width of the barcode. For example, you can try scanning this barcode:



2. When data is read, it should appear in your document.

   Depending on which scanner you have, it may also beep, or the LED may change colors to indicate a successful scan.

   By default, the cursor automatically advances to the next cell or line, ready for the next scan/read.

Wait for the "Good Scan" indication before you scan more data. If you try to scan too fast, the device can lock up until you stop scanning.

If the data does not appear how you expect it and you are using Excel Mobile, check the cell formatting.

6 | SocketScan for Plug-in Scanners and Readers

SocketScan software sends data from your Socket barcode scanner, RFID reader or magnetic stripe reader into any application running on the SoMo 650. This lets you use Socket data collection peripherals without having to program custom applications. The software comes pre-loaded on the SoMo 650.

This chapter contains generic instructions for using SocketScan on the SoMo 650 with these products:

- SD Scan Card Series 3
- CF Mag Stripe Reader Card Series 4
- CF Scan Card Series 5
- CF RFID Reader Card Series 6

For specific instructions, please refer to the *User's Guide* for your specific Socket data collection product, available in the installation CD that came with the data collection product as well as online at: http://www.socketmobile.com/support/downloads/

SocketScan 7.5.1 and later also supports the UIC683 contactless smart card reader. Please refer to UIC documentation for instructions.

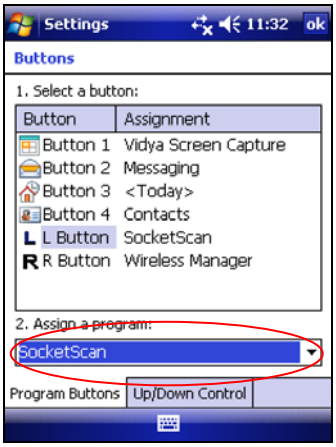
STEP 1: ASSIGN A TRIGGER BUTTON

This step is NOT required for the CF Mag Stripe Reader Card.

Method 1:

This method is for the SD Scan Card, CF Scan Card or CF RFID Reader Card 6E with any version of Windows Mobile.

1. Tap **Start | Settings | Buttons**.
2. From the **Button** list, tap to select a button to trigger your scanner. For best ergonomics, the left or right button is recommended. In the drop-down menu, select **SocketScan**. Tap **ok**.

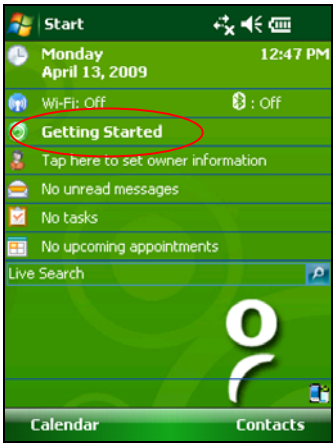


Make sure you choose SocketScan and NOT SocketScan 10.

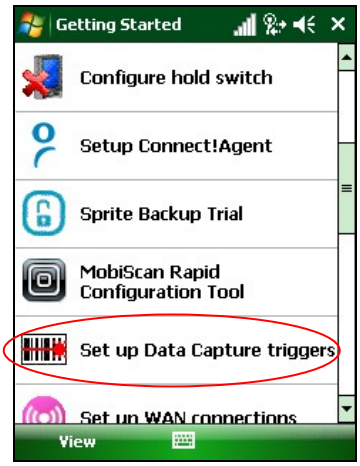
Method 2:

This method is only for Windows Mobile 6.1 or later

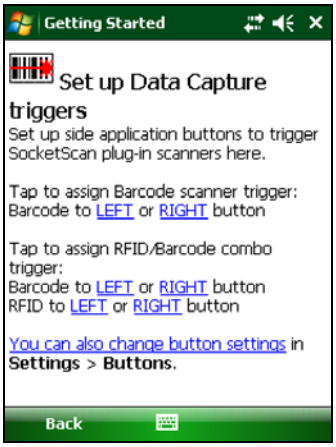
1. In the Today screen, tap **Getting Started**.



2. In the list, tap **Set up Data Capture triggers**.



3. In the next screen, tap either **LEFT** or **RIGHT** in the appropriate section to select the button you want to use to trigger your device.


Getting Started
Set up Data Capture triggers
Set up side application buttons to trigger SocketScan plug-in scanners here.
Tap to assign Barcode scanner trigger:
Barcode to LEFT or RIGHT button
Tap to assign RFID/Barcode combo trigger:
Barcode to LEFT or RIGHT button
RFID to LEFT or RIGHT button
You can also change button settings in Settings > Buttons.
Back

4. The SoMo will automatically set up the trigger button and send a confirmation message to your inbox.

STEP 2: START SOCKETSCAN

1. Press the trigger button that you assigned. This is a quick way of starting SocketScan.

   Alternatively, tap **Start | Programs | SocketScan folder | SocketScan**.

2. A SocketScan icon should appear at the bottom of the Today screen indicating that no data collection device has been inserted.

STEP 3: INSERT THE CARD

1. Open the slot cover at the top of the SoMo 650, then insert the card into the appropriate slot. Do not insert the card backwards or force the card in too hard.

2. When SocketScan is running, an icon will appear at the bottom of the Today screen. Make sure the proper icon appears to indicate that your device is ready to collect data.

Icon	Meaning
	No Socket data collection device detected.
	Ready to scan barcodes with the Secure Digital Scan Card
	Ready to read magnetic stripe data with the CF Mag Stripe Reader Card 4E
	Ready to scan barcodes with the CF Scan Card 5E2/5P or CF RFID Reader-Scan Card 6E/6P
	Ready to scan barcodes with the CF Scan Card 5X/5XRx
	Ready to read RFID tags with the CF RFID Reader Card

If you insert the card before starting SocketScan, no icon will appear.

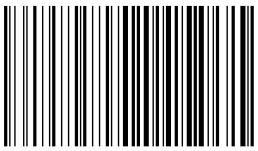
STEP 4: START APPLICATION

Start the application that you want to enter data into (e.g., Excel Mobile). From the Today screen, tap **Start | Programs** and select your program. Make sure a document, spreadsheet or form is open in your program. Place the cursor where you want data from the next scan/read to be entered.

STEP 5: SCAN OR READ DATA

1. *Scanning/RFID*: Press the trigger button to scan a barcode or read an RFID tag. Please refer to your scanner manual for the correct technique.

   When scanning a barcode, make sure the scanning beam covers the entire width of the barcode. For example, you can try scanning this barcode:

   
   ABCDE12345

   Mag Stripe: Swipe a magnetic stripe card through the slot, with the magnetic stripe facing the SoMo 650.

2. When data is read, it should appear in your document.

   Depending on which scanner/reader you have, it may also beep, or the LED may change colors to indicate a successful scan.

Wait for the "Good Scan" indication before you scan more data. If you try to scan too fast, the device can lock up until you stop scanning.

If the data does not appear how you expect it and you are using Excel Mobile, check the cell formatting.

7 | SoMo 650 Back Pack Software

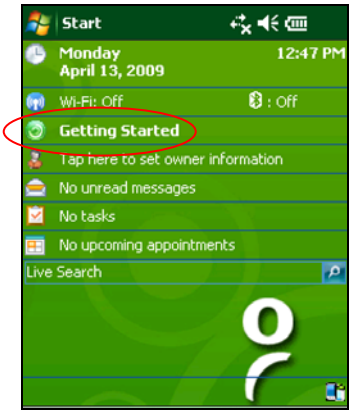
The SoMo 650 Back Pack is a wireless broadband ExpressCard adapter that enables you to add a Novatel ExpressCard modem card to access data anytime anywhere.

Back Pack software is pre-installed in SoMo devices running Windows Mobile 6 Service Pack 4 or later.

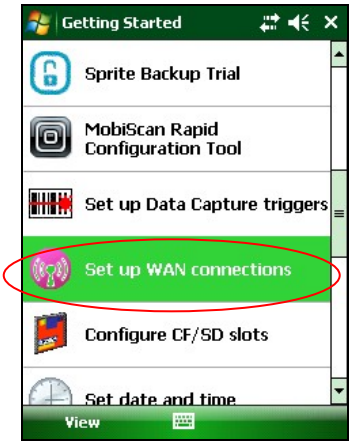
Back Pack software is compatible with Windows Mobile 6 or later If you have a SoMo running Windows Mobile 6 prior to Service Pack 4, you can download the software free by registering your device and submitting a request at: http://support.socketmobie.com

STEP 1: CONFIGURE A MODEM CONNECTION

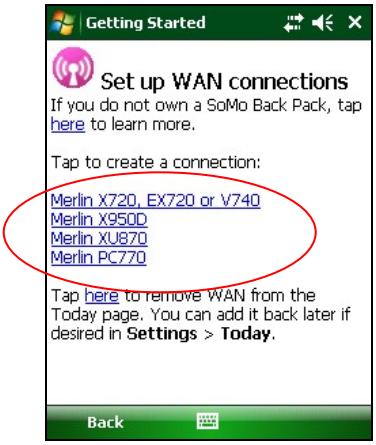
1. In the Today screen, tap **Getting Started**.



2. In the list, tap **Set up WAN Connections**.



3. In the next screen, tap on your WAN modem card.


Getting Started
Set up WAN connections
If you do not own a SoMo Back Pack, tap here to learn more.
Tap to create a connection:
Merlin X720, EX720 or V740
Merlin X950D
Merlin XU870
Merlin PC770
Tap here to remove WAN from the Today page. You can add it back later if desired in Settings > Today.
Back

4. The SoMo will automatically set up a connection for your card.

STEP 2: PREPARE THE HARDWARE

Install the SoMo 650 Back Pack and insert your Novatel WAN modem card, as shown in the *Quick Start Guide* included with the SoMo 650 Back Pack. If desired, also install the hand strap.

STEP 3: CONNECT TO NETWORK

Simply use your networking application. The modem will automatically try to connect when an application (e.g., Internet Explorer) searches for a network connection.

APPENDIX A
SPECIFICATIONS

Processor	Intel PXA270@624MHz CPU
Memory	SDRAM: 128MB NAND Flash: 1GB or 256MB SoMo File Store: 32 MB and 128 MB non-volatile memory configurations available.
Display	65K colors TFT LCD, 3.5” 16 bit-per-pixel 240 (w) x 320 (L) resolution (QVGA size) portrait and landscape modes, default portrait mode. Glass analog resistive touch panel White LED backlight
Audio	Headset Jack: 2.5mm, 4-ring type, support for both Voice & Stereo music 0.5W speaker Omni-directional microphone
Connectors	SoMo 650: DC-in (5V, 1A) USB synchronization/host cable connector Cradle: Docking connector DC-in (5V, 3A) USB synchronization cable connector USB v2 USB connector x 2 (Type A): USB v1
Wireless Connectivity (not included with SoMo 650DX)	*Bluetooth*: v2.0 + EDR Class 2 IEEE® 802.11b/g WLAN with fast roaming Cisco CCX 4.0 certified with Enhanced Wi-Fi Companion software (for Windows Mobile 6 or later, requires separate install)
Mass Storage & Expansion Slots	User accessible SD/SDIO/MMC expansion slot CF I/O Type II expansion slot
USB	USB 1.1 support host/client (x2) (Cradle only)
Battery	Standard: 3.7V 1200 mAh, rechargeable, Lithium-ion Extended: 3.7V 2600 mAh rechargeable, Lithium-ion (extended battery available separately or with SoMo 650EB or SoMo 650Rx)
Dimensions	With standard battery: 5.00 x 2.94 x 0.81 inches (127 x 74.60 x 20.6 mm) Weight: 6.25 oz (177 g) (including stylus) With extended battery: 5.00 x 2.94 x 0.98 inches (127 x 74.60 x 25 mm) Weight: 7.20 oz (204 g) (including stylus)
Operating Temperature	0° to +40° C (+32° to +120° F)
Storage Temperature	-25° to 75° C (-13° to 167° F)
Humidity	95% non-condensing

Antimicrobial Rating (SoMo 650Rx only)	JIS Z2801:2000 Test o 2.49 on Methicillin resistant Staphylococcus aureus (MRSA) o 6.07 when cleaned with Sani-Cloth® Plus brand disposable cloth wipes
Drop Specification	Multiple 1 m (3.3 ft) drops to vinyl-covered concrete With optional DuraCase protective case (sold separately): Multiple 1.3 m (4.3 ft) drops to vinyl-covered concrete
ESD Specification	+/- 8kV air discharge, +/- 8kV direct discharge
Operating Systems Available	Microsoft Windows Mobile 6 Classic *Note: If you have a SoMo 650 running Windows Mobile 5.0, an upgrade DVD for Windows Mobile 6 is available, SKU# SW1241-893*
Pre-Loaded Socket Software	Socket Wi-Fi Companion™ Socket Enhanced Wi-Fi Companion™ (available in SP4 or later)* Socket SocketScan™ 10 (supports Socket CHS Series 7 v3 barcode scanners, available in SP8 or later)* Socket SocketScan™ (supports Socket plug-in barcode / RFID / magnetic stripe readers, Socket CHS Series 7 v2, Socket CRS Series 9 and UIC683 contactless smart card reader) Socket Connect!Agent™ (for Socket CHS Series 7 v2 and Socket CRS Series 9; needs to be manually installed via Getting Started wizard for SP8 or later) Socket Modem and Ethernet Utilities Socket SoMo 650 Back Pack Utilities Socket Power Plus Battery Friendly Utility Socket CPU Performance Utility Socket Hold Switch Utility **Enhanced Wi-Fi Companion and SocketScan 10 are pre-loaded but need to be manually installed via a Getting Started Wizard.*
Pre-Loaded Third-Party Software	Programmable Home Screen Calculator MSN Messenger Client Word Mobile, Excel Mobile, PowerPoint Mobile IE Mobile, Outlook Mobile .NET Compact Framework v2.0 Remote Desktop Mobile Windows Media Player 10.2 Mobile ActiveSync Client v4.x SocketSerial drivers SOTI MobiScan Agent (available in SP8 or later) Sprite Backup (trial version)

APPENDIX B
CARE AND MAINTENANCE

For important safety and usage instructions, please refer to page 3.

Cleaning the SoMo 650 or SoMo 650DX:

- With the device switched off, clean the SoMo 650 by wiping it with a soft, clean cloth that is lint-free and slightly moistened. Do not allow the earpiece, microphone, speaker, card slots, sync/charging port or other metal surfaces to get wet.

- Do not wipe the SoMo with any corrosive liquid or coarse objects. This can damage the outer surface of the device.

Cleaning the SoMo 650Rx (antimicrobial version):

- Socket recommends Sani-Cloth® Plus brand disposable cloth wipes as the standard disinfectant wipe for the SoMo 650Rx handheld computer. Doing so will increase the JIS Z2801:2000 antimicrobial rating from 2.49 to 6.07.

- Do not use bleach-based or Dispatch® brand cloth wipes, as they negate all antimicrobial properties that have been added to the device.

Carrying or Storing the SoMo:

- Do not leave the SoMo in extremely high or low temperature environments.

- Remove the battery of the SoMo if it is not going to be used for a long period of time. Store the SoMo and its battery in a cool, dark, and dry place.

APPENDIX C
RESETTING THE SOMO 650

The SoMo 650 supports the three levels of reset defined by Microsoft for Windows Mobile powered devices:

- Soft Reset - sometimes called a "warm" reset
- Hard Reset - sometimes called a "cold" reset
- Clean Reset - sometimes called a "clean boot"

Each of these resets is designed to clear different levels of data storage and impact the hardware differently.

Additionally, removing the battery and any external sources of power from the SoMo 650 will result in the equivalent of a reset.

The following Table summarizes the system impact under these modes of operation:

State of SoMo 650 After:	All Installed Applications and Registry Settings	Running Programs	Data Associated with Running Programs	Date and Time
Soft Reset	No impact	Stopped	Lost	No impact
Hard Reset	No impact	Stopped	Lost	Lost
Clean Reset	Removed	Stopped	Lost	Lost
Battery & external power removed for less than 5 minutes	No impact	Stopped	Lost	No impact
Battery & external power removed for more than 10 minutes	No impact	Stopped	Lost	Lost

The SoMo has a power backup that maintains the date and time if the battery and all external power sources are removed. If the SoMo does not have a battery or external power source for 10 minutes, the date and time will be lost, and the power backup must be recharged for at least 10 minutes for it to properly maintain the date and time.

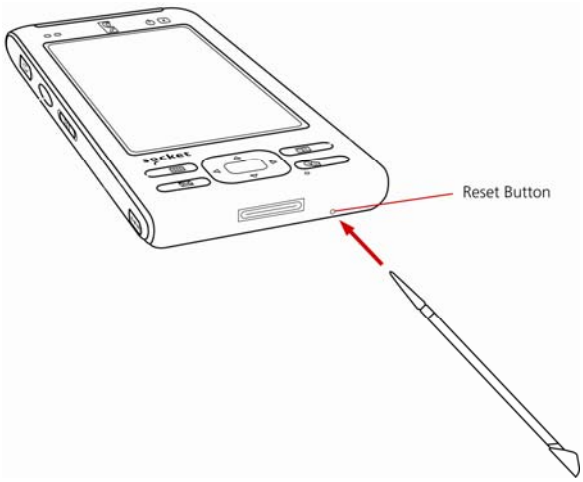
Soft Reset

A soft reset is like rebooting a computer. It is designed to stop all applications and clear out temporary data associated with running programs. No files are deleted. A soft reset is the lowest level of reset, (i.e., it clears the least amount of the device state).

It can also be used to stop application programs that are "hung" and do not respond to external input. Since Windows Mobile powered devices do not normally shut down an application after it is started, this is one way to stop all applications.

To perform a soft reset:

Using the tip of your stylus, lightly press the Soft Reset button inside the hole on the bottom of your SoMo 650 and then release.



Hard Reset

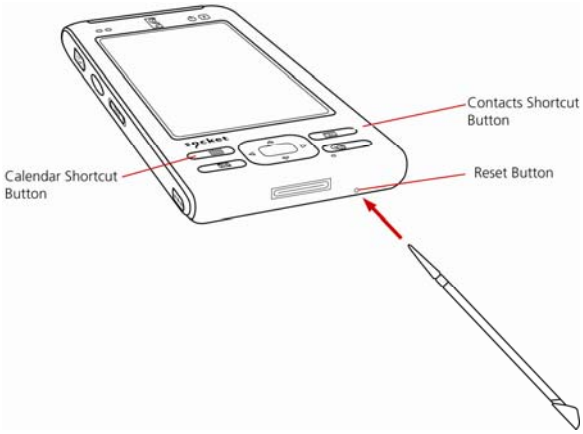
A hard reset is designed to clear all processor states, running programs, and user data. It also drives the hardware reset line to the processor, thereby clearing all system states, including the date and time. This reset should be used to remove the operating system from a "hung" or "frozen" state because of a fatal program or operating system error.

A hard reset will clear all user-installed settings, applications, and data from RAM (Random Access Memory), but any applications or configurations saved in the SoMo File Store will remain. It is useful for clearing some states that are not normally cleared with a Soft Reset

To perform a hard reset:

1. Press and hold the Calendar and Contacts shortcut buttons on your SoMo 650.

2. While holding the two buttons, using the tip of your stylus, lightly press the Reset button inside the hole on the bottom of your SoMo 650. Release the Calendar and Contacts shortcut buttons.



Press the two shortcut buttons with the index and middle finger of one hand. Hold the stylus in your other hand to press the reset button and then release.

3. A Socket Splash Screen will appear and disappear. Follow the onscreen instructions.

Clean Reset

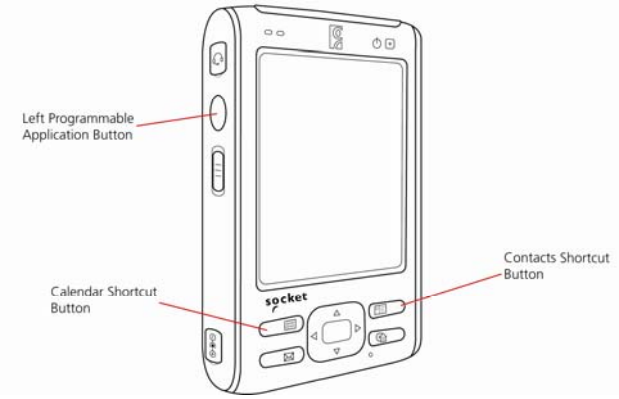
A clean reset is designed to revert the device to its factory default settings (or the latest service pack ROM update). All installed programs, data and registry settings will be cleared, except those saved in the SoMo File Store. A clean reset also drives the processor with a hardware reset, thus clearing all system states, including the date and time.

CAUTION: A CLEAN RESET IS MORE POWERFUL THAN A SOFT OR HARD RESET. IT WILL DELETE ALL USER APPLICATION FILES AND FOLDERS. WHEN YOU PERFORM A CLEAN RESET, FORMATS, PREFERENCES AND OTHER SETTINGS INCLUDING DATE AND TIME ARE RESTORED TO THEIR FACTORY DEFAULTS. ALL DATA, RECORDS AND ENTRIES, EXCEPT THOSE STORED IN ROM, WILL BE ERASED.

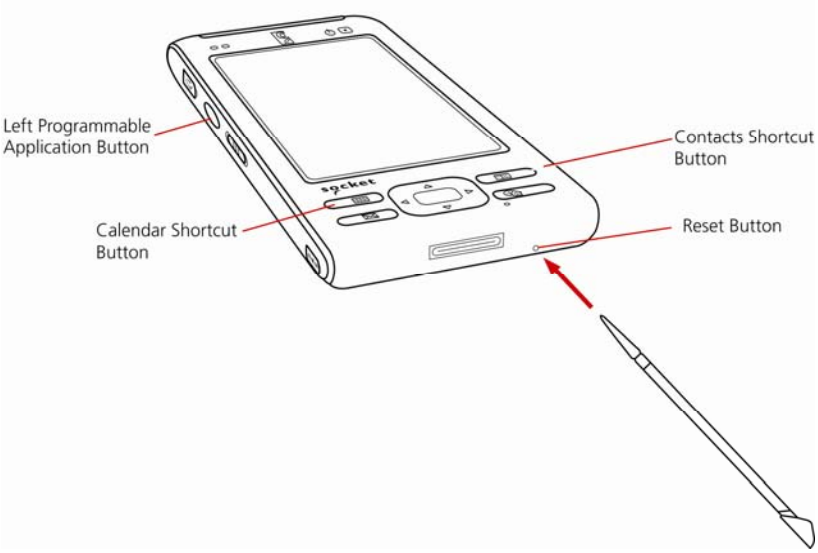
If you set a security password on the SoMo 650 and forget it, a clean reset will remove the password setting.

To perform a clean reset:

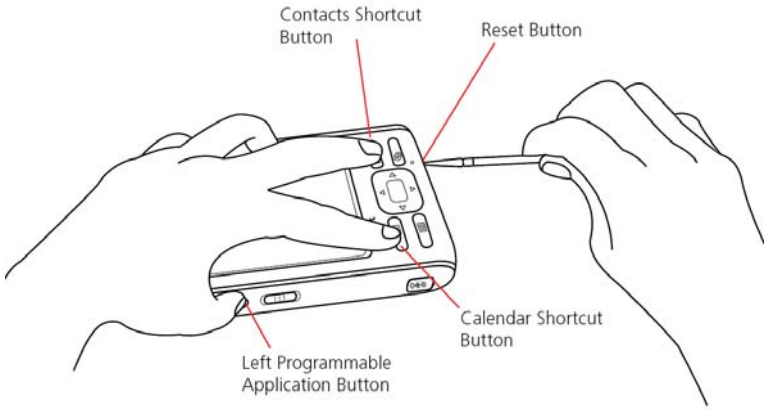
1. Press and hold the Left Programmable Application Button, the Calendar and Contacts shortcut buttons on your SoMo 650.



2. While holding the three buttons, using the tip of your stylus, lightly press the Reset button inside the hole on the bottom of your SoMo 650 and then release.



It is recommended that you hold the SoMo 650 in your left hand. Press the left programmable action button with your left thumb and the two shortcut buttons with your left index and middle finger. Hold the stylus in your right hand to press the reset button.



3. Keep pressing all three buttons until a splash screen appears with the Socket logo and then disappears.

4. After the Socket Splash Screen disappears, release the three buttons and follow the onscreen instructions.

APPENDIX D
UPGRADING THE ROM IMAGE

ADVANCED USERS ONLY!
Upgrades are available free to registered users. Log in to submit a request at: http://support.socketmobile.com. With Windows Mobile 6 SP6 and later the SoMo File Store can also be upgraded.

WARNING! You will lose all data files and applications during the upgrade process!

STEP 1: Power the Device
Socket highly recommends that you plug the SoMo 650 into an external power source using the charging cable/cradle. Alternatively, make sure the SoMo battery is adequately charged.

STEP 2: Back up Data on the Device
If you have any data on the SoMo 650, please back it up before you run the update.

STEP 3: Transfer Files using a Memory Card

IMPORTANT! It is not recommended to transfer the files using ActiveSync or the Windows Mobile Device Center!

The directory SOMO650 containing the ROM image files must be moved to the SoMo 650 with a SD or CF memory card that is formatted in FAT12 or FAT16. Make sure your memory card has at least 40 MB of free space.

Most higher capacity cards are formatted by default in FAT32, which is not supported. SDHC cards are not supported in Windows Mobile 5.

1. On your PC, use My Computer or Windows Explorer to locate the directory **SOMO650**, which contains the upgrade files.

2. Copy the SOMO650 directory to the root of your memory card.

   IMPORTANT!

   Copy the SOMO650 directory to the root of the memory card!
   Example: F:/SOMO650
   NOT: F:/Socket/SOMO650

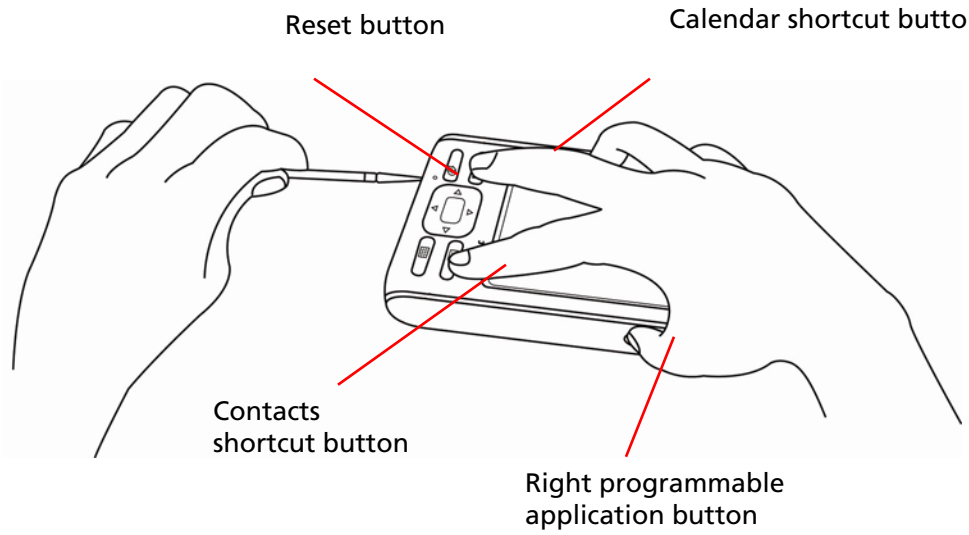
   DO NOT change the name of the folder!

3. Insert the memory card into the SoMo 650.

STEP 4: Install the Files

1. Press and hold the Right programmable application button, and the Calendar and Contacts shortcut buttons on your SoMo 650.

2. While holding the three buttons, use the stylus to quickly press the Reset button inside the hole on the bottom of your SoMo 650. Keep holding the Right programmable application button.



3. An EBOOT screen will appear with a timer, counting down from 5 seconds.

IMPORTANT! Keep holding the Right programmable application button until the timer reaches 0 seconds! Otherwise the installation will be aborted.

4. The SoMo 650 will begin to download and update the ROM image.

5. After the installation reports, "Update completed!" the Socket splash screen will appear for about 30 seconds.

6. The Windows Mobile splash screen will appear for about 30 seconds.

7. The Windows Welcome wizard will prompt you to set up Windows Mobile. Follow the instructions on your screen.

8. After setting up Windows Mobile, the Today screen will appear, and the SoMo 650 is ready to use.

APPENDIX E
TROUBLESHOOTING

SYMPTOM: *When I press the power button, the SoMo does not turn on.*

POSSIBLE REASON	SOLUTION
The SoMo battery does not have adequate charge.	Plug the SoMo into AC power or insert a charged battery.
The SoMo hold switch is on.	Slide up the hold switch on the left side of the SoMo. If you have a new SoMo, remove the sticker on top of the hold switch.

SYMPTOM: *I connected the SoMo to a PC via the USB cable, but the SoMo does not charge.*

POSSIBLE REASON	SOLUTION
Your SoMo runs Windows Mobile 6 Service Pack 7 or later and has USB charging disabled.	Tap Start | Settings | System | Power Plus | Advanced. Select Enable USB charging and tap ok.

APPENDIX F
TECHNICAL SUPPORT

If you have trouble installing or using the SoMo 650, Socket has different support options to help you.

Online Knowledge Base:
Search for articles, Frequently Asked Questions or Hot Topics any time, day or night.
http://support.socketmobile.com/EU_S1a.asp

Online Requests:
Register your product and submit a question to our Technical Support Team.
http://support.socketmobile.com

By Phone:
- Direct: +1- 510-933-3020
- EU +49 9401 5299 036

LIMITED WARRANTY

Socket Mobile Incorporated (Socket) warrants this product against defects in material and workmanship, under normal use and service, for one (1) year from the date of purchase. Product must be purchased new from a Socket Authorized Distributor or Reseller. Used products and products purchased through non-authorized channels are not eligible for this warranty support.

EXCEPTIONS: Consumables such as batteries, removable cables, cases, straps, styli, memory cards, chargers, and CF-to-PC Card adapters: 90 day coverage only

An enhanced warranty is available separately for some Socket products. For more information, please visit: http://support.socketmobile.com

Incompatibility is not a defect covered by the Socket warranty. During the warranty period, Socket will, at its option, repair or replace the defective product at no charge when furnished with proof of retail purchase, provided that you deliver the product to Socket or to an authorized Socket Service Center.

The returned product must be accompanied by a return material authorization (RMA) number issued by Socket or by an authorized Socket Service Center. If you ship the product, you must use the original container or equivalent and you must pay the shipping charges to Socket. Socket will pay surface shipping charges back to any location in the contiguous United States. This warranty applies only to the original retail purchaser and is not transferable.

Socket may, at its option, replace or repair the product with new or reconditioned parts and the returned product becomes Socket property. Socket warrants the repaired or replaced products to be free from defects in material or workmanship for ninety (90) days after the return shipping date, or for the remainder of the original warranty period, whichever is greater.

This warranty does not cover the repair or replacement of products damaged by abuse, accident, lost products, use beyond Socket's published specifications, liquid immersion, misuse or misapplication, damages caused by an act of God, nor as a result of service or modification other than by Socket unless specifically described by Socket in product documentation. This warranty does not provide coverage for any product updates, for example, updates due to design changes, except as deemed necessary by Socket, and does not cover any calibration or adjustments necessary for product functionality. This warranty does not cover refurbishing cosmetic damages such as scratched paint, cases or LCD screens. This warranty is void if you install batteries into the product that were not supplied or approved by Socket.

SOCKET IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING DAMAGE TO PROPERTY AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some states do not allow limitation of implied warranties, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. This product may contain fully tested, recycled parts, warranted as if new. For more warranty information, please visit: http://support.socketmobile.com

PRODUCT DISPOSAL: Your device should not be placed in municipal waste. Please check local regulations for disposal of electronic products.

DISCLAIMER

EXCEPT TO THE EXTENT EXPRESSLY WARRANTED BY SOCKET COMMUNICATIONS, INC, THIS PRODUCT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. EXCEPT TO THE EXTENT REQUIRED BY LAW, SOCKET DOES NOT ASSUME ANY PRODUCT LIABILITY ARISING OUT OF, OR IN CONNECTION WITH, THE APPLICATION OR USE OF ANY PRODUCT OR APPLICATION DESCRIBED HEREIN.

LIMITED SOFTWARE WARRANTY

LIMITED WARRANTY. SOCKET warrants that the original disk or CD ROM is free from defects for 90 days from the date of delivery of the SOFTWARE.

CUSTOMER REMEDIES. SOCKET'S entire liability and your exclusive remedy shall be, at SOCKET'S option, either (a) return of the price paid or (b) replacement of the SOFTWARE which does not meet SOCKET'S Limited Warranty and which is returned to SOCKET with a copy of your receipt. Any replacement SOFTWARE will be warranted for the remainder of the original warranty period or 30 days, whichever is longer. THESE REMEDIES ARE NOT AVAILABLE OUTSIDE OF THE UNITED STATES OF AMERICA.

NO OTHER WARRANTIES. SOCKET disclaims all other warranties, either express or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to the SOFTWARE and the accompanying written materials. This limited warranty gives you specific legal rights. You may have others which vary from state to state.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES. In no event shall SOCKET or its suppliers be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss) arising out of the use of or inability to use the SOFTWARE, even if SOCKET has been advised of the possibility of such damages. Because some states do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply to you.

EXPORT LAW ASSURANCES. You may not use or otherwise export or reexport the SOFTWARE except as authorized by United States law and laws of the jurisdiction in which the SOFTWARE was obtained. In particular, but without limitation, none of the SOFTWARE may be used or otherwise exported or reexported (a) into (or to a national or resident of) a United States embargoed country or (b) to anyone on the U.S. Treasury Department's list of Specially Designated Nationals or the U.S. Department of Commerce's Table of Denial Orders. By using the SOFTWARE, you represent and warrant that you are not located in, under control of, or a national or resident of any such country or on any such list.

GOVERNMENT END USERS. If the SOFTWARE is supplied to the U. S. Government, the SOFTWARE is classified as "restricted computer software" as defined in clause 52.227-19 of the FAR. The U. S. Government 's rights to the SOFTWARE are as provided in clause 52.227-19 of the FAR.

CONTROLLING LAW AND SEVERABILITY. This License shall be governed by the laws of the United States and the State of California. If for any reason a court of competent jurisdiction finds any provision, or portion thereof, to be unenforceable, the remainder of this License shall continue in full force and effect.

REGULATORY COMPLIANCE

FCC: Part 15, Class B
Industry Canada
CE: EN
TELEC
NOM, COFETEL
RoHS and WEEE compliant
Electrical Safety EN60950, UL, CUL
EMI/RFI
Wi-Fi Alliance Certification
Bluetooth Certification (BQB test), *Bluetooth* QD ID B012762
USB IF Test
Microsoft Windows Mobile 5.0, 6.1 Logo Test Certification
EU/International: EN301 489-1, -17
EN61000-4-2: 1995, ESD ± 8kV air/±4kV contact
EN61000-4-3: 1997, radiated Immunity 3V/m
EN61000-4-4: 1995, EFT ± 0.5kV
EN61000-4-5: 1995, Surge ± 0.5kV
EN61000-4-6: 1

FCC Interference Statement (USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT: RADIATION EXPOSURE STATEMENT

THIS EQUIPMENT COMPLIES WITH FCC RADIATION EXPOSURE LIMITS SET FORTH FOR AN UNCONTROLLED ENVIRONMENT. END USERS MUST FOLLOW THE SPECIFIC OPERATING INSTRUCTIONS FOR SATISFYING RF EXPOSURE COMPLIANCE. TO MAINTAIN COMPLIANCE WITH FCC RF EXPOSURE COMPLIANCE REQUIREMENTS, PLEASE FOLLOW OPERATION INSTRUCTIONS AS DOCUMENTED IN THIS MANUAL.

This PDA has been tested and demonstrated compliance when *Bluetooth* and WLAN are transmitting simultaneously. This PDA must not be co-located or operating in conjunction with any other antenna or transmitter.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with the Socket accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines."

Industry Canada Statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT: RADIATION EXPOSURE STATEMENT

THIS EQUIPMENT COMPLIES WITH IC RADIATION EXPOSURE LIMITS SET FORTH FOR AN UNCONTROLLED ENVIRONMENT. END USERS MUST FOLLOW THE SPECIFIC OPERATING INSTRUCTIONS FOR SATISFYING RF EXPOSURE COMPLIANCE. TO MAINTAIN COMPLIANCE WITH IC RF EXPOSURE COMPLIANCE REQUIREMENTS, PLEASE FOLLOW OPERATION INSTRUCTIONS AS DOCUMENTED IN THIS MANUAL.

European Union Notice:

Radio products with the CE marking comply with the R&TTE Directive (1999/5/EC), the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following

European Norms:

- EN 60950 Product Safety
- EN 300 328 Technical requirement for radio equipment
- EN 301 489-1/-17 General EMC requirements for radio equipment

Mexico:

NOM: 0802CE05828
COFETEL: RCPSOSO08-0567

8/2011 Printed in U.S.A.